

investment

opportunities

2012

ANNUAL REPORT & ACCOUNTS

responsibility



Johnson Matthey

sustainable

science

global

DELIVERING

# VALUE

developing products that enhance the quality of life  
for millions of people around the world

integrity

innovation

solutions

strategy

superior value

high tech

research

people

teamwork

# JOHNSON MATTHEY IS A LEADING SPECIALITY CHEMICALS COMPANY UNDERPINNED BY SCIENCE, TECHNOLOGY AND OUR PEOPLE.

The group is a leader in sustainable technologies and many of our products enhance the quality of life for millions through their beneficial impact on the environment, health and wellbeing. **Technology leadership** forms the basis of Johnson Matthey's strategy to deliver superior long term growth and we continue to invest in R&D to develop the next generation of sustainable products for our customers. To us, good performance is not just about profit. It's about running our business in the most **sustainable** and responsible way and so we have identified five elements of sustainability which have a material impact on our business. In this report we will update you on our progress.

## Building a Sustainable Business



### Go Online

[www.matthey.com/AR12](http://www.matthey.com/AR12)

To view our online annual report



# Johnson Matthey at a Glance



## Environmental Technologies

**Emission Control Technologies**

**Process Technologies**

**Fuel Cells**



## Precious Metal Products

**Services**

Platinum Marketing and Distribution  
Refining

**Manufacturing**

Noble Metals  
Colour Technologies  
Catalysts and Chemicals



## Fine Chemicals

**API Manufacturing**

Macfarlan Smith  
Pharmaceutical Materials and Services

**Research Chemicals**

**Environmental Technologies Division's** products and services are used globally in applications which benefit the environment. It supplies catalysts and technologies which contribute to pollution control, cleaner fuels, greener power and the more efficient use of hydrocarbon resources. Its emission control catalysts are fitted to about one in three cars around the world.

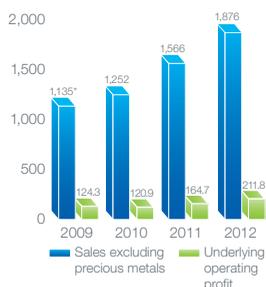
**Precious Metal Products Division** adds value to precious metals. Its wide ranging activities include the marketing, distribution and fabrication of precious metals and the manufacture of catalysts and precious metal chemicals. It is also a world leading refiner of precious metals, ensuring these valuable materials are efficiently recovered and reused.

**Fine Chemicals Division** supplies active pharmaceutical ingredients, fine chemicals and other speciality chemicals to a wide range of pharmaceutical and chemical industry customers and research institutes globally. Its products help relieve pain, treat cancer and other medical conditions, improving the quality of life for many people around the world.

### Key Statistics

Return on sales excluding precious metals	<b>11.3%</b>
Return on invested capital (ROIC)	<b>14.2%</b>
Capital expenditure	<b>£97.1m</b>
Capex / depreciation	<b>1.2</b>
Average invested capital	<b>£1,492m</b>
Employees	<b>5,640</b>

£ million



### Key Statistics

Return on sales excluding precious metals	<b>34.5%</b>
Return on invested capital (ROIC)	<b>58.9%</b>
Capital expenditure	<b>£31.6m</b>
Capex / depreciation	<b>1.4</b>
Average invested capital	<b>£341m</b>
Employees	<b>2,894</b>

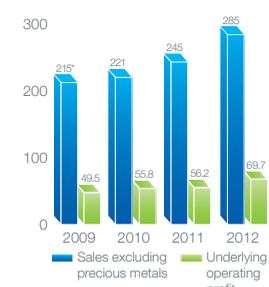
£ million



### Key Statistics

Return on sales excluding precious metals	<b>24.5%</b>
Return on invested capital (ROIC)	<b>16.7%</b>
Capital expenditure	<b>£15.8m</b>
Capex / depreciation	<b>0.9</b>
Average invested capital	<b>£418m</b>
Employees	<b>1,090</b>

£ million



\* Excluding inter-segment sales.

# Performance Highlights

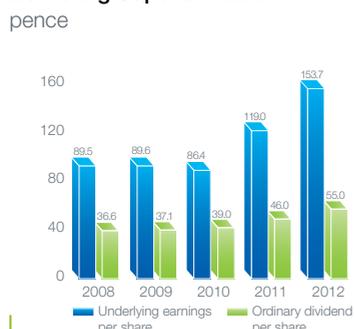
**Johnson Matthey** continued its strong performance in 2011/12 with good growth across all three of its divisions.

		Year to 31st March		
		2012	2011	% change
	<b>Financial</b>			
Revenue	£ million	<b>12,023</b>	9,985	+20
Sales excluding precious metals (sales)	£ million	<b>2,679</b>	2,280	+17
Profit before tax	£ million	<b>409.3</b>	259.3 <sup>2</sup>	+58
Total earnings per share	pence	<b>148.7</b>	85.2 <sup>2</sup>	+75
Underlying <sup>1</sup> :				
Profit before tax	£ million	<b>426.0</b>	345.5	+23
Earnings per share	pence	<b>153.7</b>	119.0	+29
Dividends per share:				
Ordinary	pence	<b>55.0</b>	46.0	+20
Special	pence	<b>100.0</b>	–	–
	<b>Social</b>			
Average number of employees		<b>9,914</b>	9,388	+6
Voluntary employee turnover	%	<b>6.4</b>	5.6	+1
Training spend per employee	£	<b>335</b>	390	-14
Charitable donations	£ thousands	<b>645</b>	517	+25
	<b>Health and Safety</b>			
Greater than three day accidents	per 1,000 employees	<b>2.07</b>	2.99 <sup>2</sup>	-31
Total accident rate	per 1,000 employees	<b>5.69</b>	7.89 <sup>2</sup>	-28
Occupational illness cases	per 1,000 employees	<b>3.5</b>	3.5	–
	<b>Environment</b>			
Energy consumption	thousands GJ	<b>4,726</b>	4,749	–
Global warming potential	thousand tonnes CO <sub>2</sub> equivalent	<b>417</b>	415	–
Total waste	tonnes	<b>120,363</b>	113,671	+6
Water consumption	thousands m <sup>3</sup>	<b>2,201</b>	2,076	+6
Total acid gas emissions	tonnes SO <sub>2</sub> equivalent	<b>444</b>	318	+40

1 Before amortisation of acquired intangibles, major impairment and restructuring charges, profit or loss on disposal of businesses and, where relevant, related tax effects.

2 Restated.

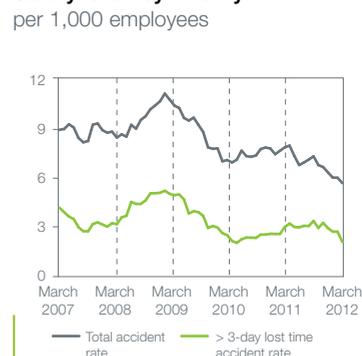
## → Delivering Superior Value



## → Reducing Carbon Intensity



## → Safety is a Key Priority



\* Calendar year.

# → Delivering Value

## CAUTIONARY STATEMENT

The Business Review and certain other sections of this annual report contain 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 the group 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.

# Contents

**This annual report** aims to demonstrate how we deliver superior value for our stakeholders. It combines our financial, social, health and safety, environmental and governance performance into one document and reflects the five elements of sustainability which we believe have a material impact on our business.

Consequently...

Our **2012** Annual Report and Accounts is divided into eight sections:



**Overview:** introduces Johnson Matthey and summarises our performance in the year. It also outlines the group's strategy for delivering superior value.



**Financial:** details the financial performance of the group and its three divisions during the year.



**Social:** highlights initiatives involving our people, our communities and other stakeholder groups. It also contains performance data relating to employees and community investment.



**Health and Safety:** outlines our performance in the year, our approach to health, safety and product stewardship and the programmes we have in place to drive continuous improvement.



**Environment:** provides more detail on the impact of our business on the environment. It details the environmental performance of our operations in the year and highlights the beneficial impact of our products.



**Governance:** introduces our board of directors and details the corporate governance structures that are in place to ensure we manage our business in a responsible and transparent way.



**Accounts:** includes the consolidated and parent company accounts and related notes, as well as the statement on responsibility of directors and the independent auditor's report on the financial accounts.



**Other Information:** contains the assurance statement on our non-financial data and a checklist against the Global Reporting Initiative. It also provides further information for shareholders, a glossary and an index to help the reader locate information in the relevant sections.



## Go Online

[www.matthey.com/AR12](http://www.matthey.com/AR12)

To view our online annual report

In addition to this integrated Annual Report and Accounts we publish case studies and further information on sustainability on the internet. Links to this supplementary information are highlighted in the relevant chapter of this report with the  symbol.

## Report of the Directors

### Business Review

#### → Overview:

##### What we mean by Delivering Value

- Johnson Matthey at a Glance (inner flap)
- Performance Highlights 2011/12 (inner flap)
- 6 Chairman's Statement
- 8 Chief Executive's Statement
- 10 Our Business
- 12 Our Strategy
- 16 Group Performance Review
- 18 Group Key Performance Indicators
- 20 Risks and Uncertainties

#### → Financial:

##### Linking profitability and sustainability

- 26 Financial Review of Operations
- 26 Environmental Technologies
- 34 Precious Metal Products
- 40 Fine Chemicals
- 43 Financial Review
- 47 Treasury Policies
- 47 Liquidity and Going Concern

#### → Social:

##### Investing in our people and our communities around the world

- 50 Social Performance Summary
- 50 Stakeholder Engagement
- 52 Building a Sustainable Workforce
- 56 Community Investment
- 58 Social Aims and Targets

#### → Health and Safety:

##### A key priority

- 62 Health and Safety Performance Summary
- 62 Managing Performance and Driving Continuous Improvement
- 62 Health Performance in 2011/12
- 63 Sustainable Health Improvement Priorities for 2012/13
- 63 Safety Performance in 2011/12
- 64 Safety Priorities for 2012/13
- 64 Product Stewardship
- 65 Product Stewardship Performance in 2011/12
- 65 Product Stewardship Priorities for 2012/13
- 66 Animal Testing
- 67 Responsible Care
- 67 Regulatory Matters

#### → Environment:

##### Reducing the impact of our operations and developing beneficial products

- 70 Environmental Performance Summary
- 70 Managing Performance and Driving Continuous Improvement
- 70 Environmental Performance in 2011/12
- 74 Environmental Aims and Targets
- 75 Biodiversity

### Governance

#### → Governance:

##### Managing our business in the right way

- 78 Letter from the Chairman
- 79 Governance and Sustainability
- 82 Board of Directors
- 84 Corporate Governance Report
- 100 Other Statutory Information
- 105 Nomination Committee Report
- 106 Audit Committee Report
- 108 Remuneration Report

## Accounts

### The details behind our financial performance

- 120 Responsibility of Directors
- 121 Independent Auditor's Report
- 122 Consolidated Income Statement
- 122 Consolidated Statement of Total Comprehensive Income
- 123 Consolidated and Parent Company Balance Sheets
- 124 Consolidated and Parent Company Cash Flow Statements
- 125 Consolidated Statement of Changes in Equity
- 126 Parent Company Statement of Changes in Equity
- 127 Accounting Policies
- 131 Notes on the Accounts

## Other Information

### Shareholdings, summaries, the glossary and index

- 170 Five Year Record – Financial Data
- 171 Five Year Record – Non-Financial Data
- 172 Basis of Reporting – Non-Financial Data
- 173 Verification and Assurance – Non-Financial Data
- 174 Shareholder Information
- 176 Global Reporting Initiative (GRI) Summary
- 177 Glossary of Terms
- 178 Index
- 179 Financial Calendar 2012/13
- 180 Company Details

**What we  
mean by  
Delivering  
Value**





- Inspecting heavy duty diesel catalysts.

- The washcoat preparation area at our Smithfield facility in Pennsylvania, USA.

- State of the art technologies at Smithfield for manufacturing heavy duty diesel catalysts.

# Overview

This section introduces Johnson Matthey and summarises our performance in the year. It also outlines the group's strategy for delivering superior value.

## Contents

- 6 Chairman's Statement
- 8 Chief Executive's Statement
- 10 Our Business
- 12 Our Strategy
- 16 Group Performance Review
- 18 Group Key Performance Indicators
- 20 Risks and Uncertainties

## Delivering Value



### → Leading the Way in HDD Catalysts

The market for catalysts to control harmful emissions from heavy duty diesel (HDD) vehicles, such as trucks and buses, is growing rapidly driven by tightening legislation for both on road and non-road applications around the world.

Johnson Matthey has developed world leading catalyst technology for HDD applications and, as a result, has established a very strong market position thanks to sustained investment in R&D and state of the art manufacturing facilities, including at our plant in Smithfield, USA (pictured). 2011/12 marked another strong year for Johnson Matthey's HDD catalyst business where sales grew by 48% to £438 million and operating profit more than doubled.

New and tighter legislation will impose increasing technical demands on the emission control catalyst systems required for HDD applications and technologies must cope with controlling oxides of nitrogen and particulate matter to extremely low levels. This inevitably results in increasing value for Johnson Matthey. Furthermore, as legislation extends to cover more vehicles and additional regions of the world, the group's commitment to maintaining technology leadership in this field positions us well to benefit from future growth in demand.

# Chairman's Statement

Tim Stevenson  
Chairman



**“Welcome to this, our first integrated annual report, which I hope will provide you with a deeper understanding of the many aspects of our business, its performance, its long term prospects, its governance and, ultimately, how we deliver value to our stakeholders.”**

In my first statement as Chairman, I am delighted to report that Johnson Matthey performed very strongly in 2011/12. During the year the company benefited from good demand for its products as well as robust precious metal prices, particularly in the first half. The group's continuing strong performance is enabled by our long term investment in research and development (R&D) and our strategy of organic growth, complemented by bolt-on acquisitions. Together these have enabled the company to achieve leading positions in a number of rapidly growing markets. The result is another year of strong growth in underlying earnings per share, which were up 29% to 153.7 pence.

The group's cash generation has also been strong: at 31st March 2012 the group's net debt (including post tax pension deficits) to EBITDA ratio was 1.0 times. As a result of this very good performance the board has carried out a review of the group's balance sheet structure. The outlook for the group remains strong; we believe it has ample resources to fund forecast capital expenditure and a further increase in R&D. The board is therefore recommending a special dividend to shareholders of 100 pence per share, which represents a total payment of approximately £212 million.

Sustainability continues to be a key element of the company's strategy and I am very pleased to be introducing this, Johnson Matthey's first 'integrated' annual report, which describes all aspects of our financial and non-financial performance. I believe that this reflects both our values and our determination to build a sustainable business, as well as communicating to all of our stakeholders our commitment to sustainable growth. In this year's annual report we have also included more comprehensive governance reporting, including in the Corporate Governance Report on pages 84 to 99 which forms a key part of the Report of the Directors.

This is in light of changes introduced by the UK Corporate Governance Code (the Code), which replaced the Combined Code on Corporate Governance in June 2010. While we reflected certain aspects of the Code on a voluntary basis in last year's annual report, this year's Corporate Governance Report fully reflects a number of substantial changes in corporate governance reporting. I hope that this integrated annual report will provide you with a deeper understanding of the many aspects of our business, its performance, its long term prospects, its governance and, ultimately, how we deliver value to our customers and to other stakeholders.

I joined the board as Chairman Designate in March 2011 and was very pleased to have been appointed as Chairman of your company at the close of last year's annual general meeting (AGM).

I recognise that an effective board is central to the long term sustainable success of the company. In the Governance section of this year's annual report we describe the structures and measures in place which are designed to ensure its continued effectiveness and we review how the principles of the Code have been applied in the year, focusing on the role and effectiveness of the board. We describe in particular the board and committee performance evaluations completed last year and underway this year. These have been especially important for me in my first year as Chairman.

I chair the board at an exciting stage of Johnson Matthey's development. Not only are its businesses making excellent progress, realising the benefits of the company's long term strategy and investment in R&D and facilities, but our Sustainability 2017 programme continues to achieve good progress towards meeting its objectives and targets. Its focus on improving resource efficiency in our manufacturing operations and developing more sustainable products for our customers should make a major contribution to growth in the years ahead.

Since joining the company, I have met a number of Johnson Matthey's major shareholders and received positive feedback on the company and its strategy. I am keen to maintain regular dialogue with our shareholders and look forward to meeting many of you at this year's AGM when there will be an opportunity for us to discuss the company's business and achievements.

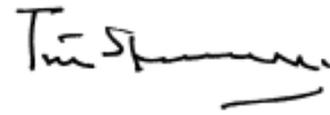
This is my opportunity to thank my predecessor, Sir John Banham, for his strong leadership of the board and many efforts on behalf of the company over the five years that he was Chairman. John brought to the board his wide ranging experience of both corporate and public sector leadership and governance. He was also a tireless ambassador for the company and an eloquent and enthusiastic advocate of its achievements and potential. On behalf of all of us at Johnson Matthey, I thank him for his important contribution and wish him all the very best for his retirement.

Sir Thomas Harris retires from the board at the close of this year's AGM having served as a non-executive director since April 2009. I would like to thank Tom for his wise counsel and contribution to the work of the board over the last three years and wish him the best for the future.

There is no doubt that our most important investment is that which we make in our people. The training, development and, most importantly, the wellbeing of our employees is vital to the success of our business. In this respect I am delighted that we have made such good progress towards achieving our target of zero accidents during the year.

Since joining the company I have met many of our employees around the world. I have been repeatedly impressed by their enthusiasm, professionalism and dedication at every level of the organisation. On behalf of all our stakeholders, I thank our employees for their hard working contribution to another successful year.

To conclude: as you will read in this annual report, Johnson Matthey is in very good shape and continues to make good progress in delivering value to its shareholders and other stakeholders. The drivers of our business remain firmly in place. Despite current global economic uncertainties, I am confident that we will continue to benefit in the years ahead from our continuing and increasing investment in R&D, our emphasis on efficient manufacturing infrastructure and the quality of our people around the world.



**Tim Stevenson**  
Chairman

# Chief Executive's Statement

Neil Carson  
Chief Executive



**“We have made good progress this year on our strategy of delivering superior value to our stakeholders through technology leadership, continuing to increase our investment in research and development and state of the art manufacturing facilities around the world.”**

I am very pleased to say that Johnson Matthey had a good year in 2011/12, continuing our strong financial performance and making good progress towards improving our environmental, health and safety performance. We have also increased our focus on developing our people and on defining and disseminating our culture, both of which are key to the success of our growing global business. The year has also seen us making good progress on our strategy of delivering superior value to our stakeholders through technology leadership, continuing to increase our investment in research and development and in state of the art manufacturing facilities around the world.

The year saw good growth across all three of our divisions. Sales excluding precious metals (sales) were substantially ahead of last year, up 17% at £2.7 billion, and the rate of growth in underlying operating profit was higher, at 23%.

Our Environmental Technologies Division had a very good year. Its Emission Control Technologies (ECT) business benefited from good growth in sales of light duty catalysts, ahead of growth in global vehicle production, and a substantial increase in demand for heavy duty diesel catalysts, particularly in North America. Our Process Technologies business performed well boosted by another excellent year from Davy Process Technology (DPT) and a good contribution from our Additives business (formerly Intercat), which was acquired in November 2010.

Precious Metal Products Division also performed well, especially in the first six months of the year. After a very strong first half, precious metal prices softened in response to concerns over the global economy which adversely impacted the division's Services businesses. Its Manufacturing businesses saw good demand across their product range.

Fine Chemicals Division exceeded our expectations, delivering excellent results in 2011/12, supported by a very strong performance from its Active Pharmaceutical Ingredient (API) Manufacturing businesses. Its global Research Chemicals business also grew well in the year.

For the group as a whole, revenue was 20% up on last year at £12 billion and sales were £2.7 billion, 17% higher than last year. Underlying operating profit was 23% higher at £450.1 million, while underlying profit before tax was also 23% up at £426.0 million. The group's underlying return on sales increased to 16.8% from 16.1% last year, primarily due to operational leverage, particularly in our heavy duty diesel catalyst business, and the excellent performance from our higher margin DPT business.

Sustainability is a key element of our strategy for growth and is well embedded in all of our businesses and embraced by our employees around the world. We continue to make good progress towards achieving our Sustainability 2017 Vision via the challenging targets that we set ourselves when we launched it back in December 2007. Our sustainability strategy and targets are subject to continuous review and during the year we have made some changes to our targets which are outlined on page 15 of this annual report. In particular we have taken a detailed look at our commitment to reduce carbon emissions from our operations.

Over the last few years we have gained a much better understanding of carbon legislation, markets and emissions from our processes and we have come to the conclusion that carbon neutrality is not an appropriate target for a growing manufacturing business like ours. However, we remain committed to driving down our carbon emissions as much as is realistically possible and with effect from 1st April 2012 we have replaced carbon neutrality with a new target to halve our carbon intensity, relative to our 2007 baseline figure, by 2017. I believe that this continues to be a stretching target.

Johnson Matthey is extremely well placed to benefit from a combination of improvements to the efficiency and environmental performance of its own manufacturing operations and from developing new products that bring significant sustainability benefits to our customers. Operational improvements and increased efficiency have undoubtedly been making a significant contribution to

the growth and success of the company in the last few years. Manufacturing is at the very heart of our business. It is how we bring our science and technology to life and deliver what our customers want, when they want it. During the year we established and launched a groupwide Manufacturing Excellence programme. I believe that this important initiative will better equip us to produce high technology products for our customers in the most sustainable and efficient way and will bring major benefits to our business in the years ahead.

Our people play a vital role in the success of our business, they truly are our most valuable resource. Their training and development and protection of their health, safety and wellbeing have long been, and remain, key priorities. We have continued to make good progress during the year in developing our systems and improving performance in these very important areas.

## Outlook

After another year of strong growth, the group is well positioned for the year ahead. However, once again, it is difficult to assess with any degree of confidence how the global economy, especially in Europe, will develop in the short term. This uncertainty has resulted in a substantial fall in precious metal prices over the last few months, despite robust demand. Nonetheless, we remain confident that our strong position in markets with structural growth will allow us to make further progress in Environmental Technologies and Fine Chemicals in 2012/13. This, however, will be offset by a weaker performance from Precious Metal Products, if precious metal prices remain at current levels.

The outlook for our Environmental Technologies Division remains positive. Emission Control Technologies should benefit from the continued development of the heavy duty diesel catalyst market and anticipated growth in light duty vehicle production in North America and Asia. However, we remain cautious about the outlook for European car and truck markets. Notwithstanding that, the removal

of the headwinds in the first half of 2011/12 associated with higher rare earth material prices and the Japanese earthquake should ensure that ECT will perform well in the first six months of this year. Process Technologies is also well placed for another year of growth, benefiting from the ongoing strong demand for DPT's licences and for additives.

Precious Metal Products Division's performance is, as we have outlined before, more dependent upon precious metal prices and their recent falls, if maintained, will impact the division's Services businesses. In addition, these businesses suffer from relatively tough comparatives as metal prices and refining intakes were strong in the first half of 2011/12. Therefore, if precious metal prices remain at current levels, the performance of the Services businesses in the first half of 2012/13 will be significantly lower than in 2011/12. The Manufacturing businesses are expected to make progress during 2012/13.

The performance of our Fine Chemicals Division in 2011/12 exceeded our expectations and the strong drivers for the business remain in place. Continued demand for our existing APIs, the introduction of new products and further geographic expansion of our Research Chemicals business' footprint should ensure that we have another strong year.

In the longer term, we are continuing to expand our manufacturing capacity around the world and to invest in R&D. Together, this should enable us to provide products that satisfy tightening global legislation and that meet the growing demand from our customers. We have strong positions in markets that will see structural growth over the next few years and, despite current global economic uncertainties, we are confident of the group's continuing growth potential.



**Neil Carson**  
Chief Executive

## Our Business

**Well  
positioned  
for future  
growth**

→ **Johnson Matthey** is a leader in sustainable technologies. We focus on clean air, clean energy and low carbon technologies and are experts in the application and recycling of precious metals. We invest in R&D to develop products that enhance the quality of life for millions of people around the world.

**Johnson Matthey** is a global speciality chemicals company. We have operations in over 30 countries and employ around 10,000 people worldwide.

The group is organised into three global divisions:

- **Environmental Technologies**  
Read more on page 26.
- **Precious Metal Products**  
Read more on page 34.
- **Fine Chemicals**  
Read more on page 40.



## Building a Sustainable Business



### A Vision for Sustainability

Our goal at Johnson Matthey is to grow our business – but to grow it sustainably. Sustainability is a key element of our strategy for continued growth and we believe that the resource efficient, environmentally responsible manufacturing of products that offer sustainability benefits for our customers can leverage commercial advantage for the group and deliver superior value.

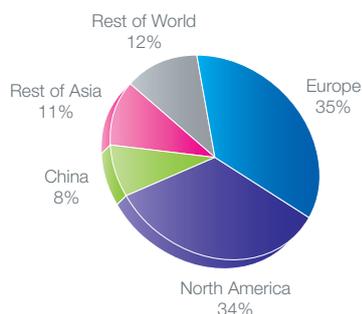
All across the group, employees are engaged in sustainability programmes focused on designing and manufacturing our products more efficiently using fewer resources and on developing improved, more efficient products for our customers.

Read more on page 13.

### → A Truly Global Company

Johnson Matthey sells its products globally which provides stability in times of regional market uncertainty. Year on year we are increasing our sales to developing markets and expanding our operations to support this global growth.

#### Sales by Region



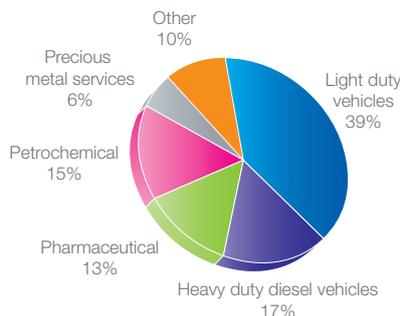
19%

Sales in Asia in 2011/12.  
Read more on pages 26 to 42.

### → Focused on Key Markets

Johnson Matthey is focused on its key markets where we can add value through applying our expertise in catalysis and platinum group metal chemistry. This approach enables us to maintain differentiation through technology and achieve leading industry positions with high margin products.

#### Sales by Key Market



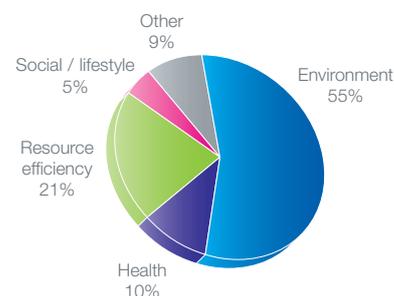
48%

Growth in heavy duty diesel catalyst sales in 2011/12. Read more on pages 30 and 31.

### → A Leader in Sustainable Technologies

Johnson Matthey is focused on developing products that deliver sustainability benefits to our customers and to society. Today, some 86% of the group's sales represent products and services which provide sustainability benefits through their positive impact on the environment, resource efficiency or our health.

#### Sales by Area of Beneficial Impact



86%

Sales from products providing sustainability benefits in 2011/12. Read more on pages 26 to 42.

### → Investing in R&D

At Johnson Matthey, we invest heavily in research and development (R&D). We recognise that this investment is vital if we are to realise new market opportunities over the years ahead. Our ability to innovate and differentiate through technology underpins our future success.



£128.6m

Gross spend on R&D in 2011/12.  
Read more on pages 14 and 15.

### → Sustainability 2017

Sustainability 2017 is Johnson Matthey's vision for building a sustainable business and includes challenging targets to support future growth. We aim to double our underlying earnings per share while cutting carbon intensity by half, achieving zero waste to landfill and halving the key resources that we consume per unit of output by 2017, the 200th anniversary of the company's foundation.



>£28m

Savings from sustainability initiatives to date.  
Read more on pages 13 to 15 and page 17.

### → Manufacturing Excellence

Manufacturing is the way we bring our science to life and our Manufacturing Excellence programme is focused on ensuring we run our manufacturing operations with the highest efficiency. Through Manufacturing Excellence we aim to boost efficiency, reduce manufacturing costs, develop our people and support delivery of our Sustainability 2017 targets.



60%

Employees working in manufacturing operations.  
Read more on pages 14 and 15.

# Our Strategy

## Strategic intent

→ **Johnson Matthey's** strategic intent is to deliver superior long term growth through technology leadership. For us, delivering 'superior long term growth' means growing our business ahead of the underlying growth rates of our key markets.

There are five major themes directing Johnson Matthey's strategy:



### Focus on leading edge catalysis

We will continue to focus upon the science of catalysis which underpins the majority of Johnson Matthey's products and enables the group to develop high performance solutions for our customers.



### Differentiation through technology

Enhanced investment in R&D in our core markets will enable the group to provide the very best products and maintain a competitive edge.



### Strong position in platinum group metals

Around 70% of Johnson Matthey's businesses involve platinum group metals (pgms) and we will continue to apply our expertise in exploiting their chemical and physical properties to deliver high technology added value products.



### Organic growth

Organic growth remains our primary focus however the group will make bolt-on acquisitions where they will accelerate the delivery of our strategy.



### New business development

We will increase our investment in new markets and sectors to target further growth from areas that are aligned with the group's technological expertise and commercial interests.

In late 2010 the group reviewed its strategy. This review involved a detailed examination of the group's past performance, its key strengths and the attributes that make it successful. Global megatrends impacting the world around us that will drive growth for the company were considered and the key strategic opportunities arising from these were identified. From this, the group's strategic direction for the next ten years was defined.



Read more on the strategy review process on pages 8 to 13 of our 2011 Annual Report and Accounts or online at [www.matthey.com/AR11](http://www.matthey.com/AR11).



There are five fundamental key enablers to our strategy. We now examine each of these in more detail to understand the impact they have on our business and their role in enabling future growth.

**1. Global Drivers that Support Future Growth**

There are four major global drivers which we believe have a major impact on Johnson Matthey's business:

- Environmental factors, climate change, regulation
- Natural resource constraints
- Population growth, urbanisation, increasing wealth
- Health and nutrition, ageing population

The figure below illustrates how these macro level trends impact the industries into which Johnson Matthey supplies its products and technologies. All four global drivers provide opportunities for growth in many of our businesses. For example:

- Projected population growth rates and increasing urbanisation and wealth, particularly in emerging markets, will drive an increase in the number of cars on our roads and therefore links through to growth in Johnson Matthey's automotive emission control catalyst business.

- Projections on how natural resources will become more depleted provide estimates on demand for recycling which in turn will benefit the group's Pgm Refining business.

These global level trends also offer opportunities for the group to leverage its expertise in catalysis and platinum group metals to deliver growth across its businesses, ahead of underlying market rates.

**2. A Vision for Sustainability**

Sustainability is a key element of our strategy for future growth where the resource efficient, environmentally responsible manufacturing of high technology products that deliver sustainability benefits can leverage commercial advantage for the group.

The group's Sustainability 2017 Vision, launched in December 2007, sets out our direction and aspirations for building a more sustainable business. Our long term sustainability strategy is underpinned by two business drivers, five key elements and six sustainability targets.

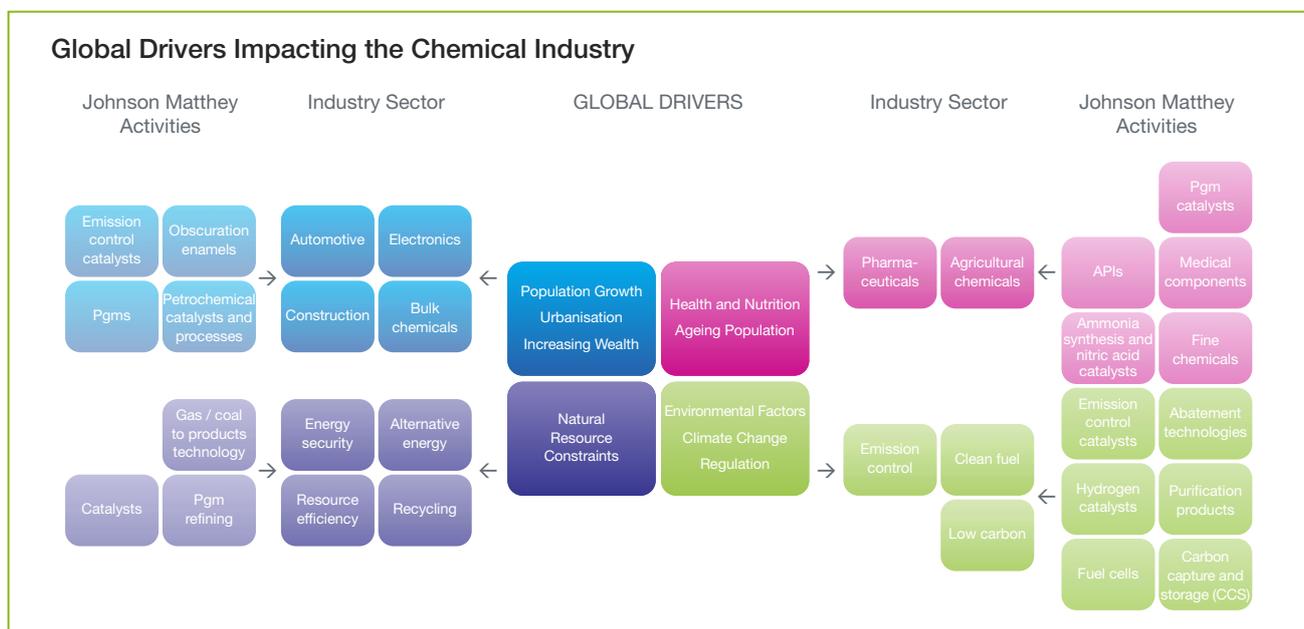
**Two Business Drivers**

There are two key business drivers for sustainability which engender responsible business practices and support future growth. The first

focuses on our internal operations and on designing and manufacturing our products more efficiently using fewer resources. This approach helps us to reduce our costs and at the same time reduces our impact on the planet. The second driver concerns our products and services and focuses on developing improved, more efficient solutions for our customers. By doing this we can enhance our customers' performance and improve their sustainability footprint which, in turn, will improve our competitiveness. Together these drivers support the development of products and services which have a beneficial impact on the planet, be it through health, social or environmental improvements.

**Five Key Elements**

Growing our business through sustainability is not only about our operations and products. We are also committed to best practice in governance, to creating a positive working environment for employees and to being a responsible partner for our customers, suppliers, communities and other stakeholders. As such, we manage sustainability across the group according to five elements: financial; governance; social; health and safety; and environment. Delivering good performance in all five areas is vital to our long term success.



## Our Strategy continued

### Six Sustainability Targets (from April 2012)



At least double earnings per share



Halve key resources consumed per unit of output



Halve carbon intensity



Reduce annual incidence of occupational illness cases by at least 30% over the five years to 2013/14



Achieve zero waste to landfill



Achieve a zero 'greater than three day accidents' safety target

#### Six Sustainability Targets

Our Sustainability 2017 Vision is supported by six challenging targets as illustrated in the figure above. Our progress towards them in 2011/12 is summarised on page 17 and further details are provided in the Financial, Social, Health and Safety and Environment sections of this report.



Read more on sustainability at Johnson Matthey at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

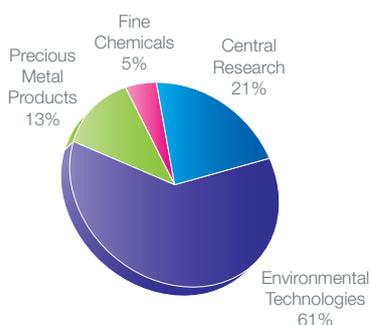
### 3. Research and Development

Continued investment in R&D underpins the future growth of Johnson Matthey. It is this investment, together with our ability to recruit the most talented scientists, that will ensure we maintain the expertise and leadership in the science of catalysis, materials chemistry and pgms that drive the development of high technology products and manufacturing processes.

Around 1,200 of our employees work in R&D representing around 12% of the total workforce and include many highly skilled scientists and engineers. Around 80% of our R&D staff work within the group's businesses in dedicated R&D and technical centres around the world. In our businesses, work is mainly focused on delivery of shorter term business specific projects or to address particular market developments or customer needs.

Alongside these activities, Johnson Matthey also has central capability on strategic R&D, located at two Technology Centres, which works on behalf of all of the group's businesses.

#### Research and Development Employees



We maintain a close link between our central R&D activities and the development work carried out directly by Johnson Matthey's businesses. This interaction is key in ensuring the rapid transfer of technology to support the continued development of innovative new products and services for our customers. Examples of our current projects are highlighted as 'Innovation in Action' case studies throughout this report.

As previously described, major global drivers provide significant opportunities for Johnson Matthey to grow and develop its existing business areas over the years ahead and R&D will play an important role in realising these opportunities.

In 2011/12 Johnson Matthey increased its gross investment in R&D by 17% to £128.6 million.



Read more on R&D at Johnson Matthey at [www.matthey.com/innovation](http://www.matthey.com/innovation).

#### Innovation in Action

Read more on our R&D activities throughout this annual report:

- Staying Ahead of the Legislation page 29
- Deeper Knowledge of NOx Removal Catalysts page 30
- An Insight on the Inside page 32
- Looking Inside a Fuel Cell page 33
- Sustainable Catalysts to Replace Mercury page 39

### 4. Manufacturing Excellence

Manufacturing is a key contributor to Johnson Matthey's success and will underpin our growth in the future. It is a major part of our business in terms of the group's global spend and provides jobs for 60% of our employees. Improving our manufacturing performance can therefore have a significant impact on our business.

The 2010/11 strategic review identified that there were opportunities for us to improve our operations and enhance our competitiveness.

Manufacturing Excellence is a long term investment in our people, manufacturing processes, engineering and technology. Lean principles are becoming integrated at all sites to increase manufacturing efficiency and improve overall performance. Technical centres of excellence are being developed to provide opportunities for manufacturing teams around the world to trial and test new equipment. Engineering teams are working to identify and develop best practice for our key processes.

The programme offers opportunities for us to increase efficiency, reduce our costs, capture our global expertise and improve our capacity with minimum capital expenditure.

## 5. People and Culture

Recruiting the right people, developing them and providing an environment which motivates them to contribute and stay with the company is fundamental to the group's long term performance. A ten year human resources strategy, developed alongside the group strategy, is focused on ensuring we can recruit, retain and develop the highly skilled people that will be needed to support our global growth.

The group recognises that our people and culture are a particular strength and, although the culture of an organisation is not easy to define, there is a distinctive culture in Johnson Matthey, irrespective of division, business, function or geographic location. Sustaining and integrating our culture as we grow the business is a challenge we are embracing on a global scale.

### Progress in 2011/12 and Future Developments

Having established and communicated its ten year strategy in 2010/11, the group has now focused on the process of embedding the strategy and on its delivery. During the year, all businesses were required to review and report on their long term strategic plans and key developments were discussed.

As a result of the strategic review, the group concluded that it would place more emphasis on new business development and work is now underway to identify new opportunities and leverage our R&D expertise to drive growth. A team has been established, tasked with finding novel applications outside our current products and markets but which align with our technology bases and wider capabilities. A rigorous market based approach has been adopted and during 2011/12, two main areas were explored. Opportunities within the water industry were investigated and a number of potential areas were identified where Johnson Matthey's technology and capabilities could be applied. The team also looked at the implications of the introduction of electric automotive powertrains, considering a range of options including battery materials and other technologies. This has identified a range of possible new business activities for the company. As a result, we have formed a team who are developing and executing the group's plans to address these markets. It is still early days, but we hope to make further progress during 2012/13.

Two additional sectors will be investigated during the year. This work is consistent with our overall objective of developing a new business with sales of more than £200 million within ten years.

Work has commenced this year to explore how we can more effectively articulate and communicate the group's culture and values. This will continue in 2012/13 and their alignment with employee behaviours and performance management will be explored further.

During 2011/12 the group launched its global Manufacturing Excellence programme to support its strategic intent. Work will continue to implement and embed the programme and from the start of the 2012/13 financial year, performance against a number of key metrics will be reported by all manufacturing sites on a monthly basis and used internally to track progress and direct actions.

As discussed in last year's annual report, in February 2011 the group reviewed its sustainability strategy to assess progress and ensure that its targets were still appropriate to business needs. The review concluded that there was no need to radically change direction, but highlighted areas where we could evolve our strategy to better support the future growth of the company. These were further investigated during 2011/12 and as a result, two amendments to our Sustainability 2017 targets have been introduced.

From April 2012 our target to achieve ISO 14001 at all major manufacturing facilities has been removed as all sites included in the original target have now achieved this. This requirement has now been included in our environment, health and safety (EHS) management system.

In 2012/13 we will continue to review the appropriateness of our target to achieve zero waste to landfill. We have made steady progress towards this target but recognise that waste to landfill is only a proportion of the waste generated by our operations. Therefore we will consider how we can broaden this target to encompass

a wider definition of waste and resource efficiency with an overall goal of reducing waste across our business.

One aspect of the strategy we considered in detail was our commitment to reduce carbon emissions from our operations. The feedback from employees had suggested that our aspirational target to achieve carbon neutrality was a concept that was difficult to understand and was causing confusion internally. Furthermore, over four years into our sustainability programme, we have a much greater understanding and knowledge of carbon legislation, markets and emissions from our processes. Consequently, we now do not believe that carbon neutrality is an appropriate target for us.

As a manufacturing business and a business that is growing, this target cannot be achieved without purchasing carbon offsets. We have conducted a lot of research into offsets and are not convinced they offer an appropriate way of mitigating our carbon emissions. We have therefore concluded this is not an approach we wish to take.

As a group we remain committed to driving down our carbon emissions as far as is realistically possible and that any increase will be at a rate that is below the rate of business growth.

To support this commitment, from 1st April 2012 we have replaced our target to achieve carbon neutrality with a new target to halve our carbon intensity by 2017, relative to our 2007 baseline figure. Our carbon intensity is the group's global warming potential (GWP) per £ million of sales excluding precious metals (sales). In 2007, our carbon intensity was 294 tonnes CO<sub>2</sub> equivalent / £ million sales and so we have set a target to halve our carbon intensity to 147 tonnes CO<sub>2</sub> equivalent / £ million sales by 2017.

Many of our products already reduce greenhouse gas emissions for our customers and we continue to focus on the development of products that mitigate climate change. Our own life cycle experts group is working to better quantify the in service benefits of our products.

### Delivering Value

Read more about how we deliver value throughout this annual report:

→ Leading the Way in HDD Catalysts	pages 4 and 5
→ Davy Process Technology	pages 24 and 25
→ Growing Our People	pages 48 and 49
→ Investing in New Capacity	pages 60 and 61
→ Developing the Next Generation of Sustainable Products	pages 68 and 69
→ Supporting Our Strategy in Fine Chemicals	pages 76 and 77
→ Customer Focus at Colour Technologies	pages 118 and 119
→ Managing Metals for Our Businesses and Our Customers	pages 168 and 169

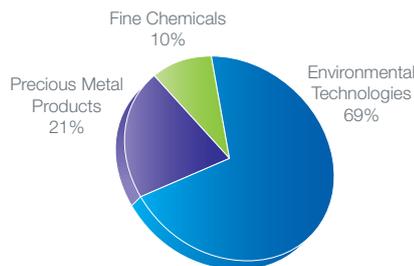
# Group Performance Review

## Financial Performance

		Year to 31st March		
		2012	2011 restated	% change
Revenue	£ million	12,023	9,985	+20
Sales excluding precious metals (sales)	£ million	2,679	2,280	+17
Operating profit	£ million	433.4	279.9	+55
Profit before tax	£ million	409.3	259.3	+58
Total earnings per share	pence	148.7	85.2	+75
Underlying*:				
Operating profit	£ million	450.1	366.2	+23
Profit before tax	£ million	426.0	345.5	+23
Earnings per share	pence	153.7	119.0	+29

\* Before amortisation of acquired intangibles, major impairment and restructuring charges, profit or loss on disposal of businesses and, where relevant, related tax effects.

## Group Sales by Division

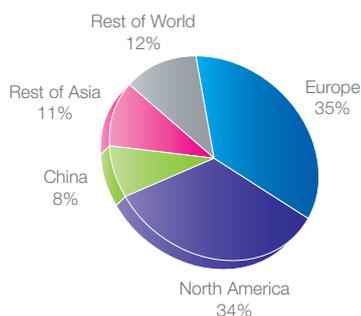


Johnson Matthey has delivered another year of strong growth with a good contribution from all of its divisions. This performance was particularly enhanced by our leading position in heavy duty diesel catalysts, a very strong year from Davy Process Technology (DPT) and excellent progress in our North American API Manufacturing business.

## Sales

Revenue for the year ended 31st March 2012 was 20% up on last year at £12.0 billion. The group's sales were 17% higher than last year at £2.7 billion. Translated at constant exchange rates, revenue for the year was 21% ahead and sales grew by 18%.

## Group Sales by Destination



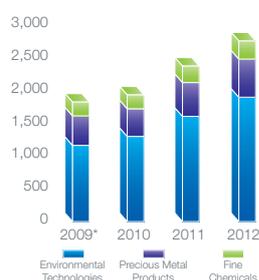
## Operating Profit

For the group as a whole, underlying operating profit (before amortisation of acquired intangibles, major impairment and restructuring charges) was 23% higher than last year at £450.1 million, while underlying profit before tax was also 23% up at £426.0 million. The group's underlying return on sales increased to 16.8% from 16.1% last year, primarily due to operational leverage, particularly in our heavy duty diesel catalyst business, and the excellent performance from our higher margin DPT business.

The performance of the individual businesses is explained in more detail in the Financial Review of Operations section on pages 26 to 42.

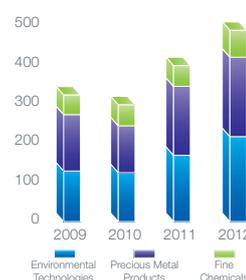
## Divisional Sales

£ million



## Divisional Underlying Operating Profit

£ million



\* Excluding inter-segment sales.

## Progress Towards Sustainability 2017

Sustainability 2017 Target	Sustainability 2017 Key Performance Indicators	Baseline 2007	2012 <sup>1</sup>	Target	Progress
 At least double earnings per share	Underlying earnings per share (pence)	82.2 <sup>2</sup>	<b>153.7</b>	164.4	
 Halve carbon intensity	Global warming potential (tonnes CO <sub>2</sub> eq / £ million sales)	294 <sup>3</sup>	<b>156</b>	147	
 Achieve zero waste to landfill	Waste to landfill (tonnes)	16,555 <sup>3</sup>	<b>10,708</b>	0	
 Halve key resources per unit of output	Electricity consumption (GJ / £ million sales)	1,098 <sup>3</sup>	<b>626</b>	549	
	Natural gas consumption (GJ / £ million sales)	1,604 <sup>3</sup>	<b>1,012</b>	802	
	Water consumption (m <sup>3</sup> '000 / £ million sales)	1,426 <sup>3</sup>	<b>0.822</b>	0.713	
 Achieve zero greater than three day accidents	Annual greater than three day accident rate per 1,000 employees	n/a	<b>2.07</b>	0	
 Reduce occupational illness cases by at least 30% by 2013/14	Annual incidence of occupational illness cases per 1,000 employees	5.3 <sup>4</sup>	<b>3.5</b>	3.7	

<sup>1</sup> Data presented is for the period 1st April 2011 to 31st March 2012.

<sup>2</sup> Data presented is for the period 1st April 2006 to 31st March 2007.

<sup>3</sup> Data presented is for the period 1st January 2006 to 31st December 2006.

<sup>4</sup> Baseline is incidence of occupational illness cases per 1,000 employees in calendar year 2008.

## Our Progress

Johnson Matthey has made good progress towards its Sustainability 2017 targets this year.

In 2011/12 our financial performance was strong with underlying earnings per share (EPS) at 153.7 pence and we believe the group remains on track to achieve its target to double underlying EPS from the 2007 baseline by 2017. As outlined in the strategy section on page 15, the group has amended its target on carbon this year and progress towards the new target, to halve carbon intensity, has been very good. Similarly, initiatives across the group's businesses to improve resource efficiency are paying off and we remain well on track to achieve our target to halve key resources per unit of output by 2017. Steady progress is being made to reduce the amount of waste we send to landfill, although year on year waste to landfill increased in 2011/12, as explained in the Environment section on page 72. Work to drive continuous improvement in health and safety is reflected by the good progress we have made this year in further reducing our number of greater than three day accidents towards our target of zero accidents, and in maintaining our incidence of occupational illness cases below our target.

Further details of the group's performance towards its Sustainability 2017 targets are explained in the strategy section on pages 13 to 15, the Health and Safety section on pages 60 to 67, the Environment section on pages 68 to 75 and on the company's website at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

## Economic Impact and Distribution of Value to Stakeholders

2011/12 marked another strong performance from Johnson Matthey with good growth across all three divisions.

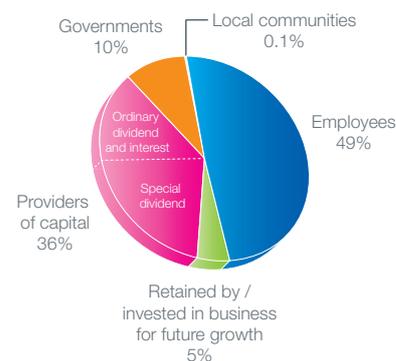
The group generated an underlying operating profit of £450.1 million and revenue of £12.0 billion in the year. Of this revenue, £9.3 billion represents the value of precious metals in our products which in many cases is passed directly on to our customers. As a result, we may see quite large year on year swings in the revenue line depending on the movements in the market prices of precious metals during the year. Sales excluding the value of precious metals is thus a better measure of the sales growth in our business.

Of the £12 billion revenue, the costs of goods and services were £11 billion (including £9 billion for precious metals) while our own operations created an estimated £1 billion in underlying added value.

Employees received the largest share of this underlying added value, some 49% of the total, reflecting the fact that Johnson Matthey is a high technology company employing many highly skilled employees across the globe. Amounts payable to providers of capital, i.e. our shareholders and financiers, were 35% of the total (including the proposed special dividend of £212 million), and corporate income taxes of 10% were payable to governments. In 2011/12 we retained / invested 5% in the business for future growth and £0.6 million was invested in our local communities.

This community investment represents cash donations made by Johnson Matthey and does not include the value of employee time donated during working hours. We are continuing to develop our systems to capture further information on our contribution to local communities, such as employees' time from volunteering.

## Johnson Matthey – Distribution of Underlying Added Value 2011/12



# Group Key Performance Indicators

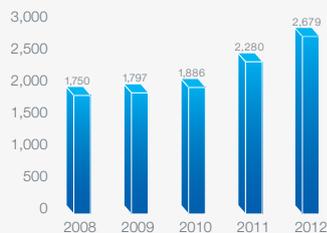
## The KPIs we use to monitor and drive performance

**Johnson Matthey** uses a range of key performance indicators (KPIs) to monitor the group's performance over time in line with its strategy.

These include key measures of the group's financial performance as well as indicators to monitor ongoing investment in facilities and in R&D. In addition, the group also uses KPIs to track the carbon footprint of its operations and to measure and drive continuous improvement in the safety, wellbeing and development of its employees.

→ These principal KPIs, together with the group's performance against them in 2011/12, are described below:

### Sales Excluding Precious Metals £ million

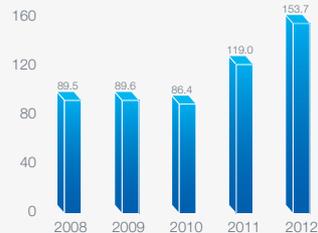


Monitoring sales provides a measure of the growth of the business. In measuring the growth of the group, we focus on sales excluding the value of precious metals because total revenue can be heavily distorted by year on year fluctuations in precious metal prices. Not only that, in many cases, variations in the value of the precious metal contained within our products are passed directly on to our customers.

#### Performance in 2011/12

In 2011/12 sales excluding precious metals grew by 17% with good growth across all three divisions as described in the Financial Review of Operations on pages 26 to 42.

### Underlying Earnings per Share pence



Underlying earnings per share is the principal measure used by the board to assess the overall profitability of the group. The following items are excluded from underlying earnings because they can distort the trend in measuring results:

- Amortisation and impairment of intangible assets arising on acquisition of businesses (acquired intangibles).
- Major impairment or restructuring charges.
- Profit or loss on disposal of businesses.
- Tax on the above and major tax items arising from changes in legislation.

#### Performance in 2011/12

This year underlying earnings per share rose by 29% to 153.7 pence supported by a strong performance across the group. Further details are provided on pages 26 to 46.

### Return on Invested Capital %



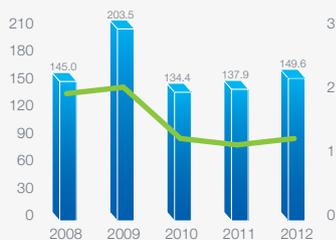
In a business as capital intensive as Johnson Matthey's, profitability alone is a poor measure of performance; it is possible to generate good operating margins but poor value for shareholders if assets are not used efficiently. Return on invested capital (ROIC) is therefore used alongside profit measures to ensure focus upon the efficient use of the group's assets. ROIC is defined for the group as underlying operating profit divided by average capital employed (equity plus net debt). ROIC for individual divisions is calculated using average segmental net assets as the denominator.

#### Performance in 2011/12

The group's ROIC increased from 19.4% to 22.3%, exceeding our target of 20%.

### Capital Expenditure

£ million capex / depn (times)



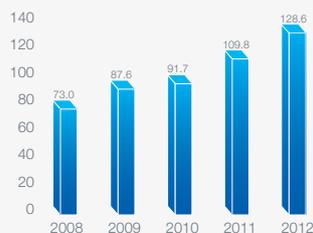
To enable the group to continue to grow, Johnson Matthey invests significant amounts in maintaining and improving our existing plants and in adding new facilities to provide additional capacity where necessary. All new capital expenditure is subject to detailed review to ensure that its investment case passes internal hurdles. Annual capital expenditure is measured as the cost of property, plant and equipment and intangible assets purchased during the year. The ratio of capital expenditure to depreciation gives an indication of the relative level of investment.

#### Performance in 2011/12

In 2011/12 the group's capital expenditure was £149.6 million which represented 1.2 times depreciation (2010/11 1.1).

### Gross Research and Development Expenditure

£ million



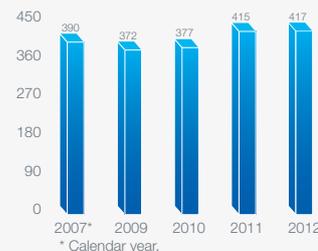
Johnson Matthey is fundamentally a technology company. To maintain our competitive position, we need to keep investing in research and development. Whilst absolute levels of research and development expenditure do not necessarily indicate how successful we are, that success rapidly feeds through to higher sales as lead times in our business can be quite short.

#### Performance in 2011/12

In 2011/12 the group increased its research and development expenditure by 17% to £128.6 million. Further details of the group's research and development activities are described throughout the Business Review.

### Sustainability – Global Warming Potential

thousand tonnes CO<sub>2</sub> equivalent



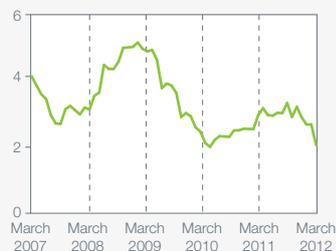
We measure our progress towards reducing the carbon footprint of our operations by looking at the group's total global warming potential (GWP). Total GWP is based on our direct and indirect energy usage and CO<sub>2</sub> equivalence which provide a strong platform for monitoring the impacts associated with energy use in our operations. We are working to broaden the scope of our GWP measurement to include all aspects of our business and to consider the beneficial impacts of our products and services.

#### Performance in 2011/12

This year the group's GWP increased only slightly from 415,000 to 417,000 tonnes CO<sub>2</sub> equivalent despite increased activity and a full year's contribution from two operations acquired during 2010/11. Further information on the group's GWP is given in the Environment section on pages 68 to 75.

### Safety – Annual Rate of >3 Day Accidents

per 1,000 employees



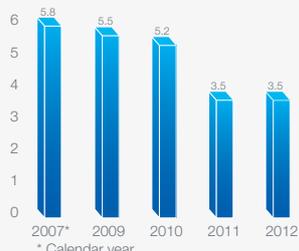
Johnson Matthey is a manufacturing business and a significant proportion of our employees work in production environments with chemicals and process machinery. Rigorous safety systems apply across all facilities and are essential if the group is to avoid accidents which could cause injury to people or damage to our property, both of which can impact the group's performance. We actively manage our safety performance through monitoring the incidence and causes of accidents that result in more than three days lost time.

#### Performance in 2011/12

The group's annual accident rate of greater than three day accidents reduced this year to 2.07 per 1,000 employees. Further details of our safety improvement programmes are provided in the Health and Safety section on pages 60 to 67.

### Occupational Health – Annual Incidence of Occupational Illness

cases per 1,000 employees



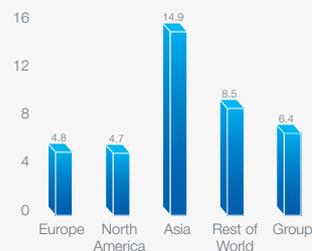
The health and wellbeing of our employees is a priority for Johnson Matthey and we are committed to minimising workplace related negative health effects. We manage our performance in this area by measuring the number of occupational illness cases arising as a result of exposure to workplace health hazards.

#### Performance in 2011/12

The annual incidence of occupational illness cases was unchanged this year at 3.5 per 1,000 employees, below our target of 3.7 cases per 1,000 employees, as a result of our initiatives to promote employee wellbeing across the group. Further details are provided in the Health and Safety section on pages 60 to 67.

### Voluntary Employee Turnover

%



The success of Johnson Matthey is partly dependent upon the extent that we are able to attract and retain talented employees. This means that being an attractive employer is a prerequisite in a competitive environment. We monitor our success in retaining our staff using voluntary employee turnover statistics.

#### Performance in 2011/12

In 2011/12 the group's voluntary employee turnover increased to 6.4% from 5.6% in 2010/11.

## Risks and Uncertainties

The effective identification and management of risks and opportunities across the group are integral to the delivery of the group's strategic objectives. The group's approach to risk management is aimed at monitoring material issues to enable the early identification of key risks and the taking of action to remove or reduce the likelihood of those risks occurring and their effect.

Risk	Description	Impact
<b>STRATEGIC</b>		
Failure to grow in the longer term, to take advantage of new opportunities or to have sufficient capacity to meet demand	The group's existing activities are well placed to deliver good growth over the coming years. New business areas will help to sustain the group's growth beyond that period.	Failure to identify new business areas or extend the group's portfolio could impact the ability of the group to continue to grow in the long term.
Inability to deliver anticipated benefits from acquisitions, capital projects and other initiatives	<p>The group's strategy is based upon organic growth. However, acquisitions and investment in capital projects will accelerate the achievement of our strategic goals.</p> <p>The realisation of anticipated benefits depends on:</p> <ul style="list-style-type: none"> <li>the performance of acquired businesses after acquisition and their successful integration into the group; and</li> <li>the delivery of capital projects on cost and to plan.</li> </ul>	Unsuccessful integration of an acquired business or project time or cost over-runs could result in the failure to realise the expected benefits and hence impact the group's results.
Changes to future environmental legislation	Approximately 50% of the group's revenue is driven by environmental legislation, particularly legislation over emissions from light and heavy duty vehicles. Further tightening of global emissions legislation generally requires improved technological solutions and the extension of emissions legislation to new applications can create opportunities for the group.	A curtailment in environmental legislation around the world could limit the group's growth potential and undermine profit margins.
Technological change	Johnson Matthey operates in highly competitive markets in which technology is a key to success. Constant product innovation is critical to maintain competitive advantage.	Failure to keep up with changes in the market place and to maintain our technology pipeline could result in a lack of competitive products and erosion of margins and / or loss of market share.

### MARKET

Global political and economic conditions	The global nature of the group's business exposes it to risk arising from economic, political and legislative change in the countries in which we operate.	<p>A sustained period of economic weakness in our markets could have a material adverse effect on the group's results.</p> <p>The group has no influence upon changes in inflation, interest rates or other economic factors affecting its business. In addition, the possibility of political unrest and legal or regulatory changes also exist in countries in which the group operates.</p>
Commercial relationships and reputation	The group has well established long term relationships with a number of customers and suppliers. Maintaining good relationships with customers and suppliers enables the group to enhance the quality of service to its customers.	The group has high shares in many of the markets in which it operates. The deterioration in its reputation or relationship with, or ultimately the loss of, a key customer or supplier could have a material impact on the group's results.

The board has overall responsibility for ensuring that risk is effectively managed across the group. However, the board has delegated to the Audit Committee the responsibility for reviewing the effectiveness of the group's system of internal control and procedures for the identification, assessment, management, mitigation and reporting of risk.

The group has in place a process for the continuous review of its risks. As part of that process, each business reviews its risks and its mitigation strategies and actions. Each risk is allocated an owner who has

the authority and responsibility for assessing, monitoring and managing it. The most significant risks identified are collated into a Group Risk Register. The Group Risk Register is reviewed by the Chief Executive's Committee. Each individual risk is considered and the status and progression of mitigation actions and plans are monitored. The Group Risk Register is reviewed by the board twice a year.

The table below sets out what the board believes to be the principal risks and uncertainties facing the group, the mitigating actions for each and an update on any

change in the profile of each risk during the course of 2011/12.

In view of the group's increased focus on the cost of rare earth materials and the establishment this year of a strategy to manage movement in their prices (as described in the Financial Review of Operations section on page 29), we have concluded that the risk associated with movements in raw material prices has decreased. As a result, we have removed this from our principal risks this year.

## Mitigation

## Changes since 2011 Annual Report

<ul style="list-style-type: none"> <li>Each business prepares a ten year strategic plan to review demand in existing markets and potential new opportunities.</li> <li>The group continues to invest in research for new products and technologies.</li> <li>Capacity and demand considerations are included in the strategic review and additional capacity management reviews.</li> </ul>	<p>The group invested £128.6 million in R&amp;D in the year (2010/11 £109.8 million).</p> <p>The group is targeting potential new markets and developing new businesses, both organically and through acquisition.</p>
<ul style="list-style-type: none"> <li>The group has clearly defined criteria for suitable acquisition targets and substantial due diligence is carried out before any acquisition is made.</li> <li>A dedicated team is appointed to manage the integration process and regular monitoring of the performance of newly acquired businesses is carried out.</li> <li>Requirements of capital projects and other initiatives are strictly defined and subject to robust approvals.</li> </ul>	<p>There were no acquisitions in the year.</p> <p>The integration and performance of the Additives business (formerly Intercat) during the year is discussed in the Financial Review of Operations on page 31.</p> <p>Significant projects (such as expansion of capacity in Emission Control Technologies, Process Technologies and Catalysts and Chemicals) are discussed in the Financial Review of Operations.</p>
<ul style="list-style-type: none"> <li>The group maintains a diverse product portfolio.</li> <li>Forthcoming changes in emissions legislation are well understood and our products are designed to meet these increased requirements.</li> <li>Profit margins can be maintained with continuous improvements in technology to reduce the cost and improve the effectiveness of our products.</li> <li>Regular reviews are undertaken to monitor areas of new potential legislation.</li> <li>Lobbying activities are undertaken where appropriate to improve the understanding of regulatory and legislative bodies.</li> </ul>	<p>No change.</p>
<ul style="list-style-type: none"> <li>The group continues to invest in its products through R&amp;D (including through our Technology Centres around the world) and as per our ten year technology plan.</li> <li>There is constant innovation and development in cooperation with our key customers.</li> <li>The group invests in its people to ensure that it maintains a high level of relevant scientific expertise.</li> </ul>	<p>No change.</p>
<ul style="list-style-type: none"> <li>The group maintains a balanced portfolio of businesses and serves a wide range of diverse customers which reduces the impact of a change to any one market.</li> <li>Management continuously monitors the performance of our businesses across the world at both business and group level.</li> <li>Our cost base contains a significant variable element and is flexible to changing political and economic conditions.</li> </ul>	<p>The group's strong performance this year reflects the continuing recovery of its businesses since the recession in the group's developed markets.</p> <p>Given the continued uncertainty in Europe (offset partially by the improved outlook in the US) we have concluded that this risk has increased since last year.</p>
<ul style="list-style-type: none"> <li>Some of the group's key relationships are supported by long term contracts, notably the group's relationship with Anglo American Platinum.</li> <li>A broad customer base is maintained to prevent the group from becoming unduly dependent on any single customer.</li> <li>Industry developments and market shares are constantly monitored.</li> <li>We actively manage our customer relationships at all levels to ensure a high quality of service.</li> </ul>	<p>No change.</p>

## Risks and Uncertainties continued

Risk	Description	Impact
<b>FINANCIAL</b>		
Pension scheme funding	The group operates a number of defined benefit pension schemes, some of which are in deficit.	Actuarial deficits could be adversely affected by changes in interest rates, the market values of investments, as well as inflation and increasing longevity of the schemes' members. This may result in greater cash contributions being required.
<b>OPERATIONAL</b>		
Changes to health, safety, environmental and other regulations and standards	In common with similar manufacturing companies, the group operates in an environment that is subject to numerous health, safety and environmental laws, regulations and standards.	Changes made to applicable laws, regulations or standards could adversely impact the group's manufacturing capability or indeed, the marketability of our products.
Availability of raw materials	The group uses many raw materials within its manufacturing processes. Several raw materials are available from only a limited number of countries and / or suppliers.	Disruption to the supply or a change in the group's ability to access sufficient stocks of these raw materials, most notably platinum group metals, rare earths or narcotic raw materials, could adversely affect the group's profit. This may be due to increased prices or because our ability to manufacture and supply product to customers may be impacted.
Employees and the recruitment and retention of high quality staff	<p>The group relies upon its ability to recruit, train and develop employees around the world with the necessary range of skills and experience to meet its stated objectives, including in relation to business growth.</p> <p>The existing management team has many years of experience at Johnson Matthey, operating in the markets and developing the technologies in which the group maintains a presence.</p>	The departure of senior management or the lack of an appropriately skilled workforce could adversely impact the group's ability to perform in line with expectations.
Security	On any given day the group has significant quantities of high value precious metals or highly regulated substances on site and in transit, the security of which is critical.	A material loss due to a breach in the group's security measures, including theft or fraud, could be significant to the group's performance.
Intellectual property (IP)	The group operates in markets in which the generation and application of technology and IP allows an advantage to be maintained. Careful monitoring of competitors' IP is required to ensure that breaches of their rights are not made by the group.	Failure to establish the group's IP rights or to identify third parties' IP rights could undermine the group's competitive advantage particularly given the group's expansion into new markets. Alternatively, not noting the expiration of patents held by third parties could mean the loss of potential business opportunities.

## Mitigation

## Changes since 2011 Annual Report

- Where actuarial deficits exist the group has agreed deficit recovery plans.
- The group works with the fiduciary committees and trustee boards of each of its pension schemes around the world to ensure that an appropriate investment strategy is in place. This includes de-risking the schemes as funding levels improve.
- Where possible, appropriate pension scheme assets are held to match movements in the schemes' liabilities.
- We monitor and proactively manage the rate at which the pension liability grows and consider liability management exercises as appropriate.
- The group is reviewing its options with regard to future pension provision for employees worldwide.
- More detail of the group's pension schemes is included in note 14 in the Accounts.

No change.

- The group carries out regular internal reviews to ensure compliance with current group policies and applicable laws, regulations and standards such as ISO 14001 and OHSAS 18001. Our quality standards are also scrutinised externally by customers, suppliers and the relevant authorities.
- We work with external consultants to understand better our regulatory responsibilities in the territories in which we operate.
- Changes in legislation are carefully monitored and if required, the composition of our products is amended to comply with latest legislation.
- We are committed to proactive communication and to building open relationships with the authorities and relevant legislative bodies, both directly and through the relevant trade associations.

No change.

- Although most of the world's platinum is mined in South Africa, the group has access to world markets for platinum and other precious metals and is not dependent on any one source for obtaining supplies.
- Appropriate sourcing arrangements are in place for other key raw materials to ensure that the group is not dependent on any one supplier.
- Where possible the group enters into fixed price contracts for key raw materials.
- We work closely with key suppliers to ensure availability, including through audits, benchmarking and specific risk reviews.
- We monitor forecast requirements on a regular basis and hold buffer stocks where necessary.
- We look to use alternative raw materials where appropriate.

No change.

- Global training and management development programmes are in place, including training of manufacturing leaders to run our operations in a consistent and efficient way through the Manufacturing Excellence programme.
- Regular reviews of management succession plans are carried out.
- Global remuneration policies are in place to ensure appropriate rewards to motivate and retain staff.
- We undertake a continuous assessment of the skills required within the group and action plans are put in place to address identified gaps.
- Succession planning is closely monitored by the Nomination Committee and Management Development and Remuneration Committee (MDRC).

No change.

- The group has highly developed security, assay and other process controls.
- Annual security audits are carried out across the group.
- Insurance cover is maintained for losses from theft or fraud.

No change.

- The group has established policies and procedures for registering patents and for monitoring its existing patent portfolio and those of third parties.
- We defend infringement claims and challenge new patents where it is appropriate to do so.
- We continuously evaluate operating restrictions and opportunities available to us through the use of our IP and know how.
- A substantial part of the group's IP is know how and this is protected through non-disclosure agreements and other legal measures.
- We restrict internal and external access to IP and know how as necessary.
- We complete security checks to safeguard both our tangible and intangible assets.
- Our investment in technical developments mitigates the risks to our IP and know how to some degree.

No change.

Linking  
profitability  
and  
sustainability

# Financial

This section details the financial performance of the group and its three divisions during the year.

## Delivering Value



### → Davy Process Technology

When a chemical manufacturer decides to build a new plant or make a new product it wants to operate the plant and make the product in the most cost effective and environmentally friendly way. Davy Process Technology (DPT) develops processes that chemical manufacturers can use to help them design and build their plant and then run it at optimum efficiency. DPT licenses this process technology to its customers and works with them as they use it to guide the construction and operation of their plant. In effect, DPT provides its customers with the flowsheet, or blueprint, for their process.

Continued investment in R&D is vital to DPT's success, enabling it to maintain a portfolio of highly advanced chemical process technologies. During 2011/12 DPT secured 14 licences and commissioned five new plants. Its engineers are now working with Nanjing Bluestar New Chemical Material Co. Ltd. in China to commission a new plant (pictured) for manufacturing three products – tetrahydrofuran, butanediol and gamma butyrolactone which have uses as solvents and in the production of polymers to make items such as training shoes, car parts, Spandex fibres and in the pharmaceutical industry. This is a second plant for Nanjing Bluestar, the first having been successfully commissioned by Nanjing Bluestar and DPT in 2009.



- On site at the new manufacturing plant.

- Research and development is vital to enable DPT to maintain its portfolio of advanced technologies.

## Contents

26	Financial Review of Operations
26	Environmental Technologies
34	Precious Metal Products
40	Fine Chemicals
43	Financial Review
47	Treasury Policies
47	Liquidity and Going Concern



# Financial Review of Operations

## Environmental Technologies

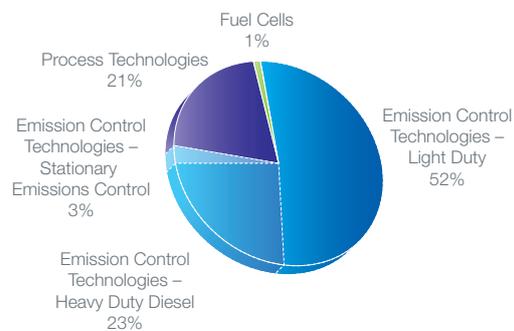
Creating products that benefit the environment

### Key Statistics

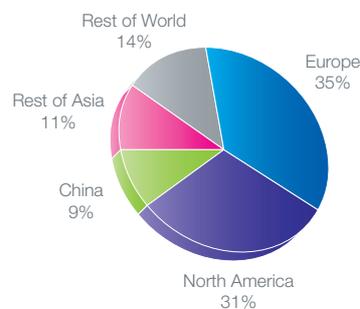
Capital expenditure	£97.1 million
Capex / depreciation	1.2
Average invested capital	£1,492 million
Employees	5,640

	Year to 31st March			% at constant rates
	2012 £ million	2011 £ million	% change	
Revenue	3,255	2,708	+20	+20
Sales excluding precious metals (sales)	1,876	1,566	+20	+20
Underlying operating profit	211.8	164.7	+29	+29
Return on sales	11.3%	10.5%		
Return on invested capital (ROIC)	14.2%	11.5%		

### Sales

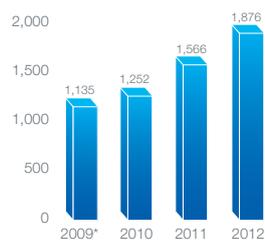


### Sales by Destination



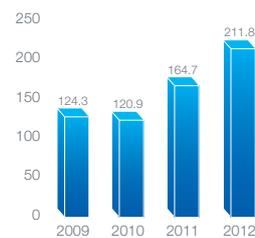
### Divisional Sales

£ million



### Divisional Underlying Operating Profit

£ million



\* Excluding inter-segment sales.

## Environmental Technologies supplies catalysts and technologies which contribute to pollution control, cleaner fuels, greener power and the more efficient use of hydrocarbon resources.

### Strategy



**Maintain differentiation through technology by investing in R&D**



**A deep understanding of markets and customers**



**Manufacturing Excellence**



**Deliver superior growth**

The division is focused on **maintaining differentiation through technology by investing in R&D**. This investment is vital to ensure Environmental Technologies can continue to develop high performance leading edge catalysts and technologies for its customers.

**A deep understanding of markets and customers** enables the division to provide the right solutions for its customers in evolving markets, for example those driven by tightening legislation. In addition, the purchase of its catalysts or technologies is often part of significant investment decisions at its customers and so strong relationships and a good understanding of customers' needs are crucial to the division's success.

**Manufacturing Excellence** is an important element of the strategy. Many of the division's activities involve manufacturing products for its customers and it is focused on running its plants at optimum efficiency to produce the highest quality products at minimum operating cost.

The division aims to **deliver superior growth** in markets that are driven by global trends, such as environmental regulation, increasing wealth and natural resource constraints, and where applying its expertise in leading edge catalysis and technologies can generate growth at rates ahead of industry baselines.

### Description of the Business

Environmental Technologies Division's products and services are used globally in applications which benefit the environment. It supplies catalysts and technologies which contribute to pollution control, cleaner fuels, greener power and the more efficient use of hydrocarbon resources. It comprises of three businesses:

#### Emission Control Technologies (ECT)

ECT consists of Johnson Matthey's global autocatalyst, heavy duty diesel and stationary emissions control businesses. We are a world leading manufacturer of catalysts for vehicle exhaust emission control and catalyst systems for the reduction of emissions from industrial processes.

ECT's products are used globally to reduce emissions from vehicles and other pollution sources to ensure they meet legislated environmental limits. Its products are fitted to about a third of all cars produced in the world and, since their introduction in 1974, these products have had a major impact on air quality across the globe, preventing many millions of tonnes of pollutants from reaching the atmosphere.

ECT's manufacturing plants are located in the UK, Germany, Macedonia, Russia, USA, Mexico, Argentina, South Africa, Japan, Malaysia, India, China and South Korea. R&D facilities are in the USA, UK, Germany, Sweden, Japan, China, South Korea and Brazil.

#### Process Technologies

Process Technologies manufactures speciality catalysts, absorbents and additives for the methanol, ammonia, hydrogen, gas / coal to products, oil refineries and gas processing industries. These catalysts allow industrial processes to operate using less energy and to convert raw materials to desired products more efficiently.

Davy Process Technology (DPT) develops chemical process technologies and licenses them to customers in the oil, gas and petrochemical industries. Its extensive portfolio includes a number of technologies which incorporate sustainable feedstocks such as waste fats and oils. Tracerco is a specialist measurement business that provides process diagnostic services through a broad range of analytical techniques and instrumentation.

Process Technologies serves customers around the world and has manufacturing sites in the UK, USA, India and China, supported by technology development facilities in the UK and the US and technical offices in all of the key markets worldwide.

#### Fuel Cells

Johnson Matthey has a world leading position in the development and manufacture of catalysts and catalysed components for fuel cells, a technology for generating low carbon power.

The business has the world's largest fuel cell component manufacturing facility in Swindon, UK for the production of membrane electrode assemblies (MEAs) for hydrogen and methanol fuelled systems and is backed by extensive research and development efforts.

Fuel cells are widely recognised as an emerging technology to power a range of equipment from cars and buses to laptops and mobile phones. Johnson Matthey Fuel Cells is at the leading edge of fuel cell component development.

#### Performance in 2011/12

Environmental Technologies Division performed well in 2011/12 achieving good growth throughout the year. Revenue grew 20% to £3,255 million; sales were 20% ahead at £1,876 million and underlying operating profit was 29% up at £211.8 million.

Environmental Technologies Division's return on sales for the year increased by 0.8% to 11.3%. ECT's overall return on sales improved with higher plant utilisation and as a result of lower costs following the closure of its Brussels plant. However, return on sales was impacted by £15 million of higher costs for rare earth materials incurred in the first half of the year. This was resolved satisfactorily in the second half. Process Technologies' return on sales was slightly ahead of last year, benefiting from the strong performance from our higher margin DPT business.

The division's ROIC improved from 11.5% to 14.2% and is expected to improve further as plant utilisation rates increase.

# Financial Review of Operations continued

## Environmental Technologies continued

### Emission Control Technologies

Emission Control Technologies' sales grew by 21% from £1,218 million to £1,470 million.

#### Light Duty Catalysts

Our light duty catalyst business, which represented 66% of ECT's sales in the year, grew well with sales up 10% to £969 million and operating profit up by a similar percentage.

In Johnson Matthey's financial year to 31st March 2012, global light duty vehicle sales grew by 3% to 76.1 million vehicles. Global production grew steadily, by 2.5%, with a strong recovery in North America throughout the year, a moribund market in Europe which declined in our second half, and slight growth in Asia, albeit affected in the first half by the Japanese earthquake and tsunami and in the second half by the floods in Thailand. In China, growth in car production was lower than last year, but still increased by 5%.

#### Johnson Matthey's Light Duty Vehicle Catalyst Sales by Region

	2012 £ million	2011 £ million	% change
Europe	588	544	+8
Asia	201	168	+20
North America	180	167	+8
Total	969	879	+10

Our sales in Europe of £588 million, which represent 61% of our light duty catalyst sales, increased by 8%, ahead of the growth in vehicle production which was only up 0.5%. Our sales benefited from growth in the proportion of diesel vehicles produced in Western Europe which represented 55% of total light vehicle production, up from 54% last year. Sales also benefited from the full fitment of diesel particulate filters (DPFs) to light commercial vehicles in Western Europe, completing the process of fitment of these products to all light duty diesel vehicles in the region.

As a result of the complex catalyst systems required to meet European diesel emissions standards, a diesel vehicle currently represents approximately five times the catalyst value of an equivalent gasoline vehicle for Johnson Matthey. Catalyst value will increase further with the introduction of Euro 6 light duty diesel emissions standards in 2014, which will require additional catalyst fitment to meet tighter NOx standards. During the year our European sales also benefited from our strong market share with some of the most successful car companies in the region and from the introduction of higher technology products. These products offer our customers opportunities to reduce costs through advanced technology, including the more efficient use of raw materials.

On 31st January 2011 ECT entered into consultation with the employees at its inefficient Brussels facility regarding its closure. The plant ceased production in July 2011 and all production was transferred to other ECT sites with annual cost savings of approximately £18 million per year.

Despite the challenges presented by the Japanese earthquake and tsunami, the floods in Thailand and slower growth in China, our Asian light duty catalyst business grew strongly with sales up 20% to £201 million. Light duty vehicle production in the region in 2011/12 grew by just over 1%. However, our sales grew at a much faster rate as the result of growth in our market share in many parts of the region and a strong recovery in our Japanese business in the second half with robust demand from the original equipment manufacturers (OEMs) in Japan once their factories were back on line. With continued economic expansion, increasing disposable income and tightening legislation across the region, Asia should remain a growth engine for ECT in the years ahead.

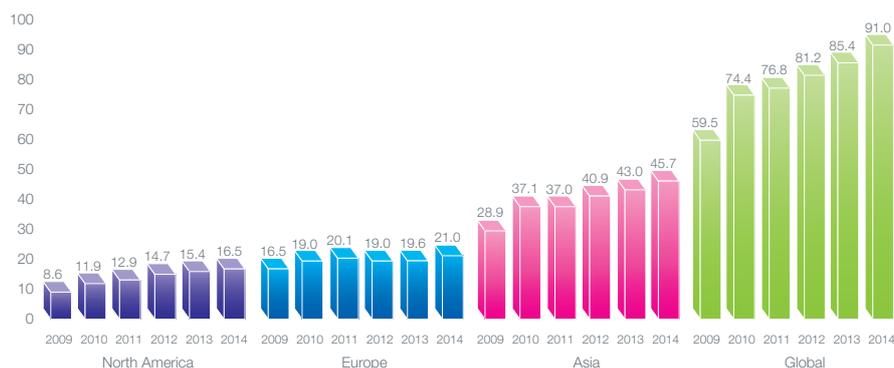
#### Estimated Light Vehicle Sales and Production

		Year to 31st March		% change
		2012 millions	2011 millions	
North America	Sales	15.6	14.5	+7.6
	Production	13.6	12.4	+9.7
Total Europe	Sales	19.0	18.7	+1.6
	Production	19.8	19.7	+0.5
Asia	Sales	30.8	30.5	+1.0
	Production	37.7	37.2	+1.3
Global	Sales	76.1	73.9	+3.0
	Production	77.7	75.8	+2.5

Source: IHS Automotive

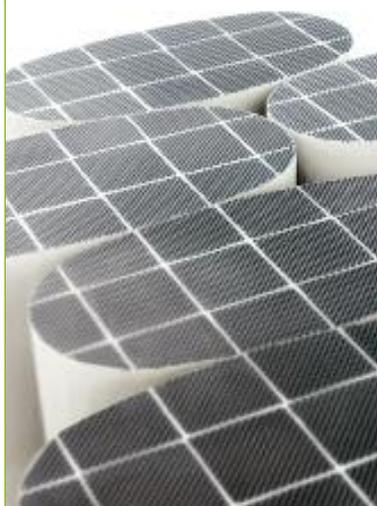
#### Light Duty Vehicle Production Outlook – 2009-2014 (calendar years)

million



Source: IHS Automotive (April 2012)

## Case Study



### → How Sustainable Are Our Products?

It takes raw materials and energy to make a catalytic converter for a car but at what point do the environmental benefits of a catalyst outweigh the environmental costs of producing it? A Johnson Matthey team embarked on an analysis to understand and better quantify the sustainability benefits of one of its environmental technologies.

The tool chosen was quantitative life cycle assessment (LCA), which allows the impact of a product to be traced during its whole life. A life cycle experts group was formed, made up of 12 people from across Johnson Matthey's businesses. The team then selected one of the company's core products – a catalytic converter for a diesel powered car – for analysis.

The study was highly insightful and informative and generated several key learning points for the company. With the help of the LCA tools, Johnson Matthey aims to better understand the environmental and health benefits of other key products and develop new technologies with enhanced sustainability benefits in the future.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

In North America the light duty vehicle market showed good growth with production in the region up nearly 10% in our financial year. Our sales grew at a slightly lower rate, up 8% to £180 million, as our North American Japanese transplant customers, where we have a higher market share, were impacted by supply chain issues following the Japanese earthquake and tsunami and flooding in Thailand.

Since mid 2010, prices of rare earth raw materials have increased dramatically following the imposition of export quotas by the Chinese government. The main rare earth material that we use is cerium oxide, which is used to provide oxygen storage capabilities in catalysts for gasoline vehicles. Rare earth prices peaked in mid 2011 and, although now well below previous highs, prices remain significantly above those in the first half of 2010. In response to this situation, ECT took steps to reduce the impact of rising rare earth material costs by a combination of thrifting, substitution for cheaper raw materials and negotiating price surcharges with its customers. Due to the magnitude and speed of the cost increases, ECT's results were adversely affected by around £5 million in 2010/11 and £15 million in the first half of 2011/12. However, by the second half of 2011/12 the effects of higher rare earth prices were fully mitigated and any future increases should no longer impact the business.

### Innovation in Action



### Staying Ahead of the Legislation

Catalysts are now routinely fitted to vehicles to control the emissions of pollutants including carbon monoxide, nitrogen oxides, unburnt hydrocarbons and soot. However, legislators are now starting to address the issue of greenhouse gas emissions from vehicles too, with Europe, North America and Japan all proposing limits. In Europe, for example, a carbon dioxide (CO<sub>2</sub>) emissions limit of 95g/km by 2020 has been proposed.

One method of decreasing CO<sub>2</sub> emissions (and improving fuel economy) is to use the waste heat in the exhaust to promote a chemical reaction between exhaust gases and some added hydrocarbons to generate a higher calorific value fuel that can be fed back into the engine to help combustion efficiency.

One approach is to use a catalyst promoted steam reforming reaction at elevated temperature to generate a hydrogen rich fuel to feed back into the engine. Given that the exhaust contains both steam and waste heat, the steam reforming reaction is an attractive technology for tackling CO<sub>2</sub> emissions while at the same time improving fuel economy.

Johnson Matthey, in collaboration with the University of Birmingham in the UK, has been studying systems to generate hydrogen mixtures from exhaust gas and added fuel (e.g. gasoline), demonstrating feasibility both in the lab and on small single cylinder engines. We are now working to develop this further, with partners including Ford, Jaguar Land Rover and Cambustion, as part of a project that is partially funded by the UK's Technology Strategy Board. The project has a number of themes with an overall goal of providing a series of measures to reduce CO<sub>2</sub>. Our work is focused on demonstrating that a catalytic hydrogen generator (reformer) can be integrated with a four cylinder gasoline engine to deliver a reduction in CO<sub>2</sub> emissions of up to 4%.

# Financial Review of Operations continued

## Environmental Technologies continued

### Innovation in Action



### Deeper Knowledge of NOx Removal Catalysts

Johnson Matthey's range of emission control catalysts includes vanadium based products that use selective catalytic reduction (SCR) to control oxides of nitrogen (NOx) emissions from industrial powerplants. In order to further enhance our knowledge of these SCR DeNOx catalysts and the chemistry of NOx removal, we have turned to an advanced characterisation technique which allows us to probe our catalysts at the atomic scale.

This technique, called solid state nuclear magnetic resonance spectroscopy (SSNMR), has been available to Johnson Matthey for a number of years through its collaboration work with leading universities. Recently however, via a knowledge transfer partnership with the University of Warwick in the UK, we have brought the technique in house, thus enabling us to study a wider range of advanced materials in a faster time. We have successfully used SSNMR to study vanadium based SCR DeNOx catalysts and improve our understanding of the molecular environment of the catalytically active vanadium species. In addition, we continue to work with scientists at the University of Warwick to perform even more advanced spectroscopic analyses on our materials. This information is proving invaluable in helping us to develop novel, higher performance catalysts to tackle harmful NOx.

### Heavy Duty Diesel Catalysts

Sales of heavy duty diesel (HDD) catalysts for both on road and non-road applications grew strongly again this year, up 48% to £438 million and operating profit more than doubled.

Production of heavy duty diesel trucks in North America continued to grow robustly throughout the year, increasing by 50% to 452,000 vehicles as trucking companies replaced their ageing fleets. In Europe, truck sales recovered last year from the global downturn and production growth this year remained robust at 7%.

### Johnson Matthey's Heavy Duty Diesel Vehicle Catalyst Sales by Region

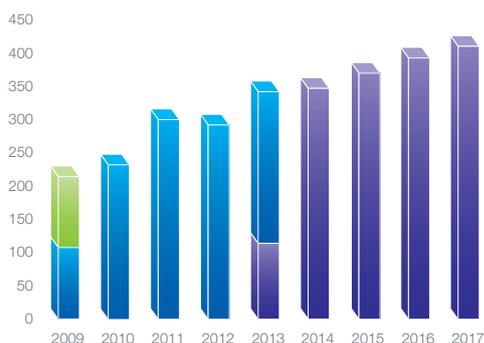
	2012 £ million	2011 £ million	% change
North America	295	194	+52
Europe	116	91	+27
Asia	27	11	+137
<b>Total</b>	<b>438</b>	<b>296</b>	<b>+48</b>

In North America our sales grew in line with truck production, up 52% to £295 million as we maintained our strong market share. In Europe our sales were up 27% to £116 million, well ahead of growth in truck production in the EU. However, our European sales also include export sales of around £5 million to Brazil, where Euro V legislation started at the beginning of 2012, and strong sales into Eastern European markets. HDD catalyst sales in

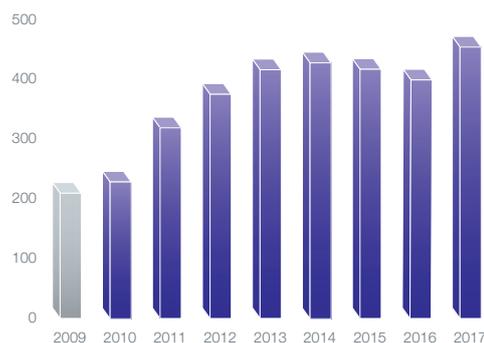
### Heavy Duty Diesel Vehicle Sales Outlook (calendar years)

Legend: Euro IV (green), US 07 (grey), Euro V (blue), Euro VI / US 2010 regulations (dark blue)

#### EU Truck Sales thousands



#### USA Class 4-8 Truck Sales thousands



Source: LMC Automotive (April 2012)

### Estimated HDD Truck Sales and Production

		Year to 31st March		% change
		2012 thousands	2011 thousands	
North America	Sales	405.2	287.4	+41.0
	Production	451.8	301.0	+50.1
EU	Sales	298.7	257.4	+16.0
	Production	386.4	360.2	+7.3

Source: LMC Automotive

Japan grew from a low base to £27 million, as new legislation requiring the fitment of DPFs came into force. The implementation of Euro IV legislation in China has been delayed until mid 2013 due to issues with the supply of low sulphur diesel fuel. However, very low level sales of HDD catalysts have commenced to OEMs in both China and India as truck manufacturers prepare for future legislation. At only Euro IV equivalent and with relatively simple engines, these markets are likely to have lower technology requirements than Europe or North America and thus we are likely to face much more competition from our existing competitors and local players.

During the year sales also commenced to non-road OEMs, such as manufacturers of construction, mining and agricultural equipment, in the USA and Europe where legislation requiring the use of emission control catalysts is being phased in between 2011 and 2015. Sales of HDD catalysts to non-road customers grew from a low base, contributing £20 million in the year.

Towards the end of the year ECT commenced a major expansion project at its plant in Macedonia that will double capacity at the site. Plans were also approved to increase our DPF production capacity at Royston, UK. Both of these projects will provide additional capacity for the high technology products required for tighter European light and heavy duty diesel legislation, commencing in 2014. In addition, during the year the business has added capacity in China for upcoming HDD requirements and expanded its plants in India and Malaysia to serve growth in car production in India and South East Asia.

#### Process Technologies

Process Technologies delivered good growth in the year with sales 19% up at £401 million. The business benefited from another excellent year from DPT and from a full year's contribution from the Additives business (formerly Intercat), which was acquired in November 2010 and supplies speciality products to the petroleum refining industry. Operating profit was also well ahead of last year, boosted by the very strong performance from the higher margin DPT business.

In the Ammonia, Methanol, Oil and Gas (AMOG) business, which includes the Additives business, sales of its catalysts, absorbents and speciality additives were 27% ahead at £256 million. Excluding Additives, sales would have been 3% up. Catalyst sales to ammonia customers grew well in the year and were 8% ahead at £45 million, however as we expected, sales of methanol catalysts were lower at £42 million, 14% down on those in 2010/11 which saw commissioning of a number of new plants in China and the Middle East. Sales of catalysts to hydrogen customers grew strongly again this year, up 40% to £67 million. Legislation requiring lower sulphur levels in fuels and the continued trend of processing dirtier, heavier crude in refineries supported demand for hydrogen which in turn generated an increase in our sales. Demand for gas purification products, used to remove contaminants such as sulphur and mercury from gas streams, was impacted, with sales 33% down on last year, as the business continued to feel the effect of delayed investment in large gas processing projects.

The Additives business made a good first full year's contribution to AMOG and is performing ahead of our expectations at the time of acquisition. We are already leveraging technology synergies between our additives and refinery catalysts and are drawing on the customer relationships in both businesses to create new opportunities for the combined product range.

## Case Study



### → From Waste Stream to Commercial Byproduct

In 2004 a water treatment facility at our Clitheroe plant in the UK began operating. At that time, the cost of disposing of waste sodium nitrate was a significant financial overhead. Today, much of that waste stream has become a commercial product, Nitratrete.

A programme of market research and innovation followed the opening of the water treatment facility and customers for the waste stream were identified.

Since then, Clitheroe has worked closely with its customers to improve the quality and consistency of the product and to develop other applications.

Significant financial benefits have been achieved by avoiding disposal costs of unsold byproduct and generating revenue from sales. The environmental benefits are equally clear. By 2017, the target is to commercialise 90% of the sodium nitrate produced at Clitheroe. This is a powerful example of a win-win for sustainability – reducing waste and increasing profit.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

# Financial Review of Operations continued

## Environmental Technologies continued



### An Insight on the Inside

The manufacture of catalysts frequently involves the processing, blending and mixing of fluids or slurries with complex flow behaviours (or rheologies). Achieving a well mixed combination of materials in our catalyst manufacturing processes is critical to ensuring final product quality and optimum catalytic performance in our customers' applications. Fundamental research at the laboratory scale, using representative fluids and advanced experimental techniques, has been used to build our knowledge of the types of non-ideal mixing that can occur.

We have also used a technique called electrical resistance tomography (ERT) on our manufacturing plants to compare different mixing system designs. ERT provides us with a picture of how well the contents of our reaction vessels are mixing. We have used the technique to identify best mixing system designs and define best practice which has been implemented on new manufacturing plants and retrofitted to our existing operations. Through ERT we are gaining an invaluable insight into what is happening inside our vessels which enables us to optimise our mixing systems and thus ensure the highest catalyst performance for our customers.

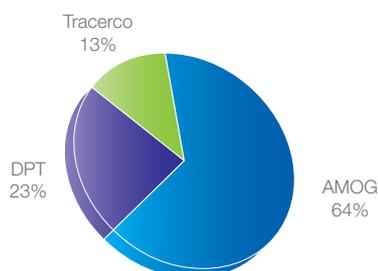
Process Technologies continued to benefit from energy security concerns in China which are driving projects to monetise coal reserves in the country. This has supported sales of our catalysts for producing both chemicals and substitute natural gas (SNG) from coal. In other parts of the world, particularly the USA, the extraction of shale gas has contributed to lower gas prices compared with those of oil. This provides new opportunities for our syngas catalysts.

The business saw continued success in the development of catalysts for gas to liquids (GTL) applications. It signed a ten year agreement with CompactGTL to develop, manufacture and supply catalysts for its modular GTL commercial scale plants which can be used for remote oilfields in onshore and offshore locations to convert gas into sulphur free liquid fuels.

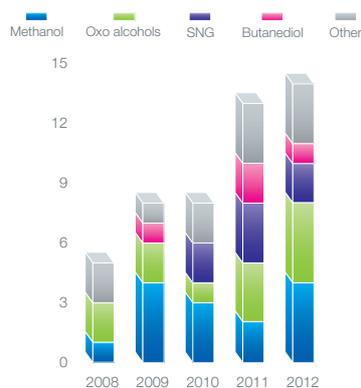
DPT had an excellent year, building on its strong performance in 2010/11. This higher margin business delivered sales of £94 million, which were 42% ahead of prior year, and secured licence and engineering contracts for 14 new plants across its portfolio of technologies. Increased demand for petrochemicals in China continued to drive growth in DPT and the business won contracts for ten plants there, including two SNG plants, four methanol plants and two oxo alcohols plants. Outside of China, DPT also secured licences for speciality chemicals plants in Malaysia and in the Netherlands, and oxo alcohols plants in France and Saudi Arabia.

In recent years a significant amount of chemical manufacturing capacity has been installed, especially in China, and this has benefited DPT. We expect that the number of new plants and hence licences available to DPT will be maintained in 2012/13 but is likely to reduce thereafter. Despite this, the outlook for DPT remains positive as global drivers, such as increasing wealth in emerging markets and energy security, support demand for its technologies. Furthermore, the business continues to invest in the research, development and commercialisation of new process technologies, including those which utilise sustainable feedstocks, to maintain its leading global position. This year saw DPT commercialise three new technologies which now are under construction, including a process which converts waste oils and fats into second generation biofuels.

### Process Technologies' Sales



### Davy Process Technology – Projects Awarded





- Fuel cell catalyst testing at the Johnson Matthey Technology Centre in Sonning, UK.

- Development of new process catalysts at our Billingham, UK facility.

Tracerco recovered well after difficult trading conditions in 2010/11. Its sales in 2011/12 were 22% ahead of prior year as the business benefited from renewed activity in global oil and gas markets supported by the high oil price. This has encouraged oil and gas companies to exploit more difficult to recover resources and has boosted demand for Tracerco's specialist technologies.

### Fuel Cells

Our Fuel Cells business was adversely affected by a slowdown in demand for stationary combined heat and power units this year as our customers delayed their product deployment programmes.

The development of fuel cell technology for transport applications, especially cars, continues. Advances in both vehicle development and hydrogen fuelling infrastructure around the world remain on track for initial market introduction of fuel cell powered vehicles within around five years. Components for automotive applications remain an important opportunity for Johnson Matthey and we have continued to increase our investment in R&D for automotive applications during the year.

As a result of slower demand and our increased R&D expenditure, the net expense of our Fuel Cells business increased by £4.3 million to £9.2 million this year.

Global drivers, particularly those relating to environmental and energy security issues, continue to support interest in fuel cell technology for transport and for heat and power applications in buildings. Furthermore, our strong relationships with system developers and our investment in manufacturing infrastructure position us well in the developing fuel cell market where high performance platinum group metal catalysts and technology are key.

### Innovation in Action



### Looking Inside a Fuel Cell

Collaborating with other leading players has always been an important element of our R&D programmes, giving us the opportunity to work with the world's smartest scientists and the very latest technology and equipment. In an extension to our collaborations, Johnson Matthey has established a deeper partnership with Cambridge University in the UK, sponsoring its chemical engineering activities, providing financial support and seconding two Johnson Matthey scientists to work at the university.

For the last four years the company has been closely involved with research and teaching activities at the Department of Chemical Engineering and Biotechnology at Cambridge University. Current research activities include magnetic resonance imaging of catalysts and reactions, developing spectroscopy and microscopy techniques to study materials and catalysts, and research into fuel cells through the use of microfluidic devices.

A microfluidic device is so called because it can be built at a small scale to mimic a larger real life system, such as a fuel cell; this allows precise control of flows within the device and enables the device to be used in conjunction with analytical equipment, which gives us an insight into what is actually going on inside the device. In our work with Cambridge University we are looking at fuel cell devices for simultaneous production of chemicals and power generation, known as cogeneration, and, through the use of these techniques, we are gaining new knowledge of the detailed chemical workings of a fuel cell.

# Financial Review of Operations continued

## Precious Metal Products

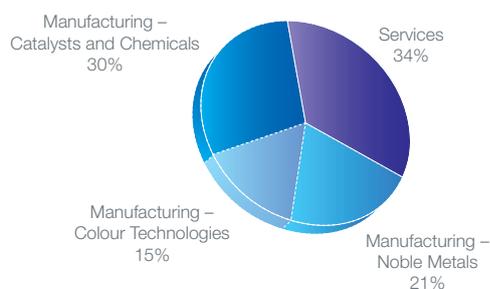
**Adding  
value to  
precious  
metals**

### Key Statistics

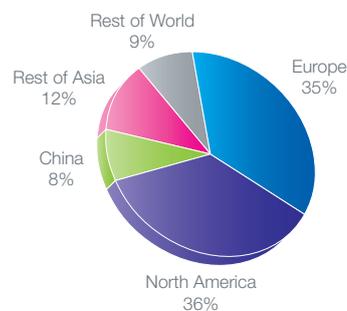
Capital expenditure	£31.6 million
Capex / depreciation	1.4
Average invested capital	£341 million
Employees	2,894

	Year to 31st March			% at constant rates
	2012 £ million	2011 £ million	% change	
Revenue	9,841	8,270	+19	+20
Sales excluding precious metals (sales)	582	541	+8	+8
Underlying operating profit	200.8	172.9	+16	+16
Return on sales	34.5%	31.9%		
Return on invested capital (ROIC)	58.9%	55.9%		

### Sales

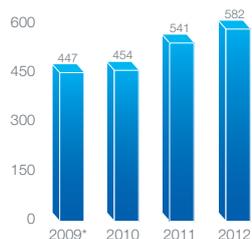


### Sales by Destination



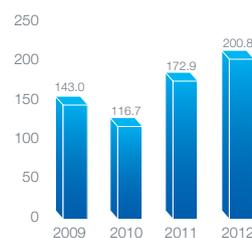
### Divisional Sales

£ million



### Divisional Underlying Operating Profit

£ million



\* Excluding inter-segment sales.

## Precious Metal Products' sales increased by 8% supported by good demand across all of its businesses.

### Strategy



#### Leverage our deep understanding of:

- Catalysis and pgm chemistry
- Materials science and manufacturing



#### Provide customer solutions through investment in R&D



#### Offer first class services to our external and internal customers



#### Deliver superior growth

Through leveraging its deep understanding of catalysis, pgm chemistry, materials science and manufacturing, Precious Metal Products can apply expertise in the fundamentals of chemistry, materials and process design to ensure it continues to develop leading edge products and manufacturing routes.

The division is focused on providing customer solutions through investment in R&D. R&D is at the heart of all Johnson Matthey's activities and whilst the division contains a mix of newer and more mature businesses, constant innovation means that a high proportion of its portfolio consists of products developed within the last decade.

Offering first class services to external and internal customers is an important element of the strategy. The division serves external customers and also provides vital services to other Johnson Matthey businesses either through the provision of precious metals or through refining and recycling spent process or customer material. Focusing on the quality and scope of the services it offers is key to maintaining a competitive position.

The division aims to deliver superior growth by targeting higher technology areas where its expertise in adding value to precious metals can generate growth at rates ahead of industry baselines.

### Description of the Business

Precious Metal Products Division (PMPD) adds value to precious metals. Its wide ranging activities comprise two main areas: Services businesses and Manufacturing businesses.

#### Services Businesses

The activities of our Services businesses comprise the marketing, distribution, refining and recycling of platinum group metals (pgms) and the refining of gold and silver. As well as serving their external customers around the globe, the Services businesses also provide a critical service to businesses in the Johnson Matthey group and their customers. Around 70% of Johnson Matthey's products and businesses involve pgms and so the sourcing and recycling of them is critical to the continuity and profitability of the group. Our Services businesses comprise two areas:

#### Platinum Marketing and Distribution

This includes our worldwide platinum marketing and distribution activities. Marketing is headquartered in Royston, UK with support facilities in Philadelphia, USA and Hong Kong. We are the world's leading distributor of pgms and the sole marketing agent for Anglo American Platinum, the world's largest producer of platinum.

#### Refining

Johnson Matthey is a leader in the recycling and refining of precious metals. Our refining and recycling operations provide a vital service to ensure these valuable natural resources are recycled and reused as efficiently and sustainably as possible.

Our Pgm Refining and Recycling business recovers pgms from spent catalysts and other secondary materials and refines primary pgms from global mining operations. It has facilities in the UK and USA.

Our Gold and Silver refining business comprises our gold and silver refining and bullion manufacturing operations. The business serves the world's mining industries and recycles secondary scrap material. Its operations are located in the USA and Canada.

#### Manufacturing Businesses

The activities of the Manufacturing businesses include the fabrication of products using precious metals and related materials, pgm and base metal catalysts and pgm chemicals. There are three Manufacturing businesses:

#### Noble Metals

Noble Metals produces a wide range of precious metal and other fabricated products for industrial and medical applications and Johnson Matthey is the market leader in pgm fabricated products for industrial applications. Its manufacturing operations are based in the UK and USA.

Many of Noble Metals' products have a positive impact on our health or on the environment. It manufactures components used in medical devices which are used in life saving surgery for maintaining cardiovascular health. Its products also include catalyst systems which are used in nitric acid manufacturing plants to abate nitrous oxide (N<sub>2</sub>O), a highly potent greenhouse gas. To date, reductions equivalent to over 35 million tonnes of carbon dioxide have been achieved using these systems.

#### Colour Technologies

Headquartered in the Netherlands, our Colour Technologies business manufactures high technology functional coatings which include black obscuration enamels and silver conductive materials for automotive glass. It also makes colours, enamels and decorative precious metal products for other glass applications such as bottles and architectural glass as well as for tableware and other ceramic applications. Manufacturing takes place in the Netherlands, USA and South Korea.

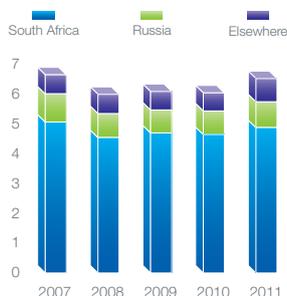
#### Catalysts and Chemicals

Catalysts and Chemicals manufactures precious and base metal catalysts which are used to enhance the operating efficiency of chemical and pharmaceutical manufacturing processes. It also manufactures precious metal chemicals for a wide range of applications. The business has manufacturing operations in the UK, USA, Germany, India and China.

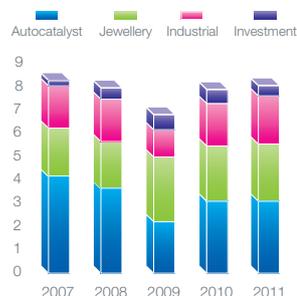
# Financial Review of Operations continued

## Precious Metal Products continued

**Supply of Platinum  
2007-2011**  
million oz

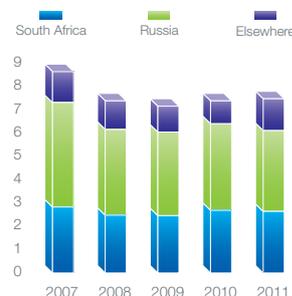


**Gross Demand for Platinum  
2007-2011\***  
million oz

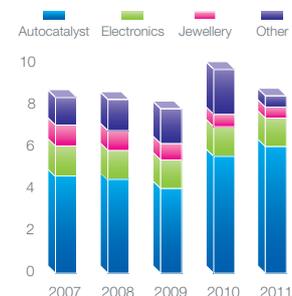


\* Recycling of scrapped autocatalysts, electronics and jewellery contributed 1.41 million oz in 2009, 1.83 million oz in 2010 and 2.05 million oz in 2011.

**Supply of Palladium  
2007-2011**  
million oz



**Gross Demand for Palladium  
2007-2011\*\***  
million oz



\*\* Recycling of scrapped autocatalysts, electronics and jewellery contributed 1.43 million oz in 2009, 1.85 million oz in 2010 and 2.35 million oz in 2011.

### Performance in 2011/12

Precious Metal Products Division's revenue increased by 19% to £9,841 million. Its sales were 8% up at £582 million, supported by good demand across all of its businesses. Underlying operating profit was 16% ahead at £200.8 million with good profit growth in all of the division's businesses.

### Services Businesses

Sales in the division's Services businesses, which represent 34% of PMPD's sales, grew by 10% to £199 million. Profit grew strongly in the year due to continued good demand for precious metal refining services and slightly higher average precious metal prices.

### Platinum Marketing and Distribution

Global demand for platinum increased by 2% in the calendar year 2011. Demand from the autocatalyst sector grew only

modestly. Strong demand in the heavy duty diesel sector was offset by lower demand from the light duty diesel sector, due to increased use of palladium, and from Japanese car makers in the aftermath of the March 2011 earthquake. Demand trends in other sectors were broadly positive with industrial applications enjoying a cyclical upturn. Supply increased due to releases of metal from in process and refined inventories as underlying mine production in South Africa declined. After being close to balance in 2010, the platinum market moved into surplus in 2011.

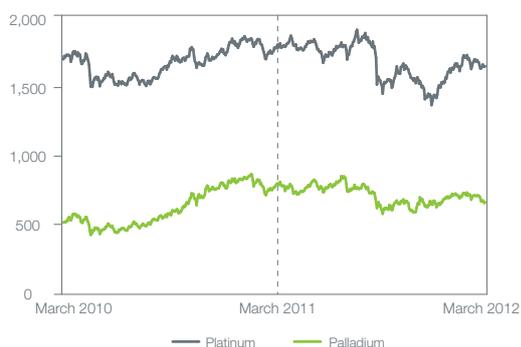
The price of platinum reflected these weaker fundamentals. After reaching a high point of \$1,911/oz in August, the price retreated for the remainder of the calendar year, caught up in the general liquidation across the commodity sector, to end the year below \$1,400/oz. Platinum averaged \$1,670/oz for the financial year, virtually unchanged on 2010/11.

The balance of the platinum market is expected to be similar in 2012, with both supply and demand expected to be somewhat lower than in 2011. Investment sentiment is likely to continue to have the determining influence on the platinum price.

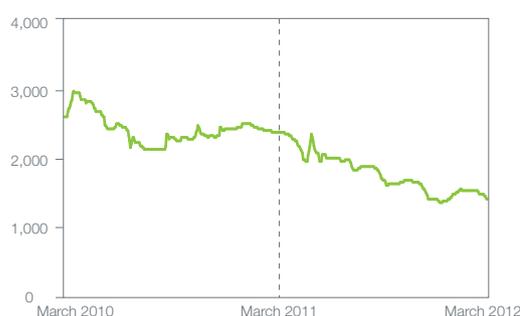
The palladium market moved into surplus in 2011 with growth in industrial demand outweighed by further Russian stock sales and net liquidation in the physically backed Exchange Traded Fund (ETF) investment market. The demand side was a mixed picture with autocatalyst demand reaching a new high but other industrial demand showing only moderate growth. Supplies of newly mined palladium were flat but there was a sharp increase in metal recovered from autocatalyst recycling.

Having opened the year at \$770/oz, the palladium price suffered in the face of weak fundamentals. After reaching a year high of \$845/oz in June, palladium had retreated to \$570/oz by October as ETF liquidation reached a peak. The price recovered slowly in the rest of the year to average \$710/oz, up 15% on the average for 2010/11.

**Platinum and Palladium Prices**  
US\$/oz



**Rhodium Price**  
US\$/oz



## Case Study



### → Process Improvements in Refining Bring Reward

Activities at Johnson Matthey's Royston site in the UK include the refining of platinum group metals and a project on one of the operation's core purification steps has delivered swift improvements, targeting four of the Sustainability 2017 goals.

Whilst the business' technology for this core purification step is well established, a project and cross functional team were set up to improve the process and make the operation more sustainable.

The resulting benefits were significantly reduced raw material usage, effluent generation and carbon emissions, as well as significant cost savings.

The project combined structured problem solving with innovation and further improvements are planned. The sustainability dividend is closely entwined with efficiency gains and financial benefits, and these results make a significant contribution to Johnson Matthey's vision for a sustainable business.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

With significantly lower shipments of Russian state stock anticipated in 2012 and a modest increase in demand, the palladium market is expected to swing back into deficit. This will be supportive of a rising price trend although external economic factors, particularly in emerging markets, are expected to have a significant influence.

The rhodium market was once again oversupplied in 2011 as modest growth in demand was outpaced by a rise in supplies and higher volumes of metal recovered from scrap autocatalysts. With a growing surplus, the price found little support, falling \$1,000/oz to close the financial year at \$1,400/oz. The average price of \$1,734/oz was down 28% on 2010/11. The rhodium market is expected to remain in surplus in 2012, suggesting limited upside potential in the price.

#### Refining

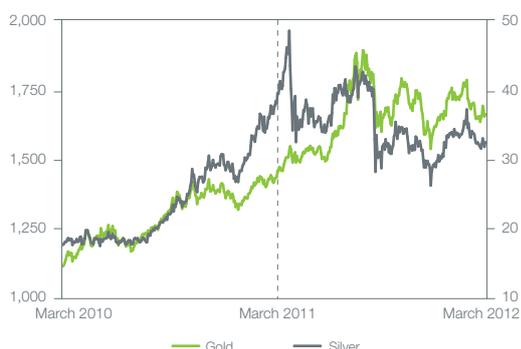
Our Refining businesses had another strong year, led by our gold and silver refineries. In our Pgm Refining business sales were 1% up on 2010/11. Volumes were strong in the first half but there was some slowing of demand in the second following the fall in pgm prices during September. The business continued to benefit from its key strategic position in the refining of pgms from end of life autocatalyst scrap, with volumes 20% up on the strong growth seen in the prior year. Intakes of the more difficult to refine insoluble pgms, rhodium, ruthenium and iridium, also continued to be strong, benefiting from further development of the business' world leading pgm chemistry and refining capabilities in this area. Operational improvements and continued focus on capacity management resulted in a reduction of metal tied up in refining processes and the business continues to work on long term projects to add value for its customers.

Both of our gold and silver refineries had a strong year. Throughputs were up by 13% for gold and 5% for silver against a back drop of record levels in the prior year. Our refinery in Salt Lake City, USA benefited from several new mines reaching optimal output during the year. In 2011/12 gold and silver prices averaged \$1,661/oz and \$36/oz, up 28% and 50% respectively on those in 2010/11. The second half saw a slowdown in demand for recycling as the economy started to recover in the US. However, demand for investment products such as gold and silver bars were at a record high, particularly in China.

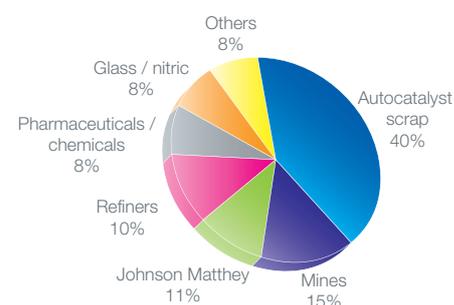
#### Gold and Silver Prices

gold US\$/oz

silver US\$/oz



#### Pgm Refining Throughput by Market Sector



## Financial Review of Operations continued

### Precious Metal Products continued

#### Manufacturing Businesses

Sales in our Manufacturing businesses, which represent 66% of PMPD's sales, were up 6% to £383 million. Operating profit was well up on prior year.

#### Noble Metals

Following last year's strong recovery, Noble Metals' sales grew 4% to £125 million. However, operating profit was well ahead of last year with a trend towards higher added value products for the automotive and medical device sectors and improved market share following the success of several new product introductions.

Sales of industrial products, which represent 70% of Noble Metals' sales, grew by 4% to £88 million. The business has developed a range of new higher performance pgm alloy catalysts used in fertiliser manufacture. This has enabled us to increase our market share and outperform market growth.

Carbon trading opportunities continue to be the main driver for the use of N<sub>2</sub>O abatement systems in the nitric acid production industry. Noble Metals continued to see good demand for these products

during the year and, despite recent falls in the market price for carbon, sales continued to grow. Further growth opportunities will depend upon the legislative environment as developed countries tackle the threat of climate change. The business is well placed to respond.

The business has also developed a range of high technology pgm alloys used in manufacturing spark plugs designed to meet the automotive industry's demand for improved performance and fuel efficiency. During the year the business has invested in increased production capacity to serve this growing market.

Sales of medical components (30% of Noble Metals' sales) were 6% up on last year at £37 million driven by record demand for products used primarily in the cardiovascular markets. Government healthcare initiatives and an ageing population in the US are resulting in a higher number of medical procedures. This, together with increasing wealth in China, India and Southeast Asia, is driving demand for our products. During the year the business invested in high technology

fine hole cutting equipment at its San Diego, USA operation to support growing demand for micromachined parts. It also expanded its facility in San Jose, USA to service increased demand for nitinol tubing which is used in nitinol stents to treat peripheral vascular disease.

#### Colour Technologies

Colour Technologies' sales were 6% up on last year at £87 million and operating profit grew ahead of sales. The year saw good growth in sales of obscuration enamels for the automotive glass industry, particularly in China and the Americas, supported by the introduction of innovative new products. High precious metal prices continued to adversely impact demand for decorative precious metal products but had little impact on functional applications of these materials, for example in the aerospace industry. The year also saw a strong increase in sales of conductive silver pastes to the automotive glass industry resulting from a combination of improved products, successful collaboration with customers and market growth.

## Case Study

### → Interactive Training Promotes Sustainability in Downingtown

Johnson Matthey's Colour Technologies operations in Downingtown, US, set up a sustainability training programme for all of its employees. The programme offered interactive learning, practical exercises and insights into the fundamentals of sustainability, achieving 100% participation among employees.

The training schedule kicked off with an overview session designed to increase awareness and encourage engagement. In the second session, employees explored the use of streamlined life cycle assessment tools on a real life example of relevance to the business. Other parts of the training covered Johnson Matthey's Sustainability Intranet, where employees were shown how to contribute to it, and use of a carbon calculator tool to enable staff to think about their own carbon footprint.

The outcome is a workforce with greater understanding and renewed enthusiasm. Developing employee awareness and encouraging use of tools such as the streamlined life cycle assessment and the Sustainability Intranet play an effective part in strengthening involvement in the company's sustainability agenda.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).



### Catalysts and Chemicals

Catalysts and Chemicals' sales grew by 8% to £171 million. Demand for our catalysts was good, supported by new product launches for solvent manufacturing and growth in sales of newly developed pgm catalysts for the petrochemical market. The business also saw good growth in sales of catalysts for the production of oleochemicals, particularly in Asia, and in sales of platinum coated discs used in contact lens disinfecting systems. During the year the business commissioned its new pgm catalyst plant in Shanghai, China mainly to service customers in the pharmaceutical and fine chemical sectors.

Sales of chemical products, which include pgm salts used in the manufacture of autocatalysts, were down on prior year mainly due to the impact, particularly in the first half, of the Japanese earthquake and tsunami on demand from Japanese automakers. The year saw the introduction of 'It'sFresh!' sheets, which contain our e+™ ethylene remover, to major UK supermarkets to extend the shelf life of fruit. Whilst current sales are relatively modest, we are optimistic that our sales will exceed £10 million per annum within the next few years.

### Innovation in Action



### Sustainable Catalysts to Replace Mercury

The development of more sustainable products is a key component of Johnson Matthey's Sustainability 2017 Vision. Our scientists are not only working on the creation of new solutions for new markets, but also on developing more sustainable alternatives for existing applications.

Johnson Matthey, together with Jacobs Engineering, has developed a new product to replace a mercury based catalyst for making vinyl chloride monomer (VCM), a chemical used in the manufacture of PVC. Current demand for this catalyst, which is used mainly in China, is around 10,000 tonnes per annum.

Our new catalyst is an innovative supported precious metal catalyst. Initial research to create a mercury free catalyst formulation began at the Johnson Matthey Technology Centre in Sonning, UK in 2006. Once a successful catalyst had been identified, its manufacture was scaled up at the company's Catalysts and Chemicals' facility in Royston, UK. The catalyst is now in evaluation trials in a VCM pilot plant in China and construction of a full scale demonstration VCM plant is underway.

Johnson Matthey's expertise in materials characterisation has played a key role at every stage in the new catalyst's development. It has enabled us to determine the exact distribution and chemical form of precious metals within the catalyst at the atomic scale. This information has provided us with an understanding of the catalyst's performance and provides us with a solid basis for further catalyst development and future customer support.

# Financial Review of Operations continued

## Fine Chemicals

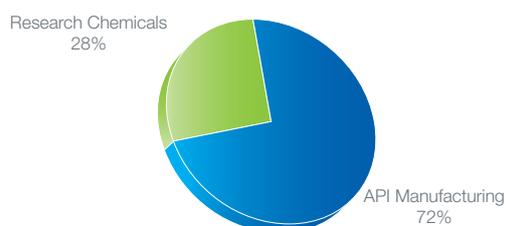
Providing products that ultimately enhance quality of life

### Key Statistics

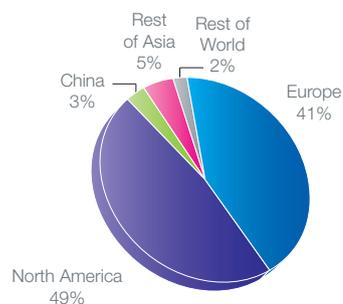
Capital expenditure	£15.8 million
Capex / depreciation	0.9
Average invested capital	£418 million
Employees	1,090

	Year to 31st March			% at constant rates
	2012 £ million	2011 £ million	% change	
Revenue	292	255	+15	+16
Sales excluding precious metals (sales)	285	245	+16	+17
Underlying operating profit	69.7	56.2	+24	+26
Return on sales	24.5%	22.9%		
Return on invested capital (ROIC)	16.7%	13.7%		

### Sales

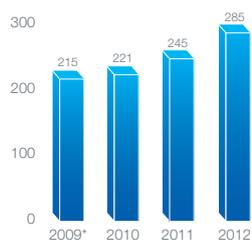


### Sales by Destination



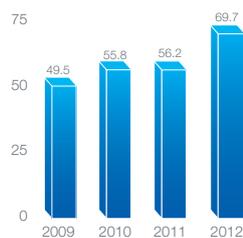
### Divisional Sales

£ million



### Divisional Underlying Operating Profit

£ million



\* Excluding inter-segment sales.

## Fine Chemicals' products help relieve pain, treat cancer and alleviate other medical conditions.

### Strategy



**Deliver niche products to the generic pharmaceutical market**



**Leverage synergies between research, development and manufacturing**



**Increase market share of established products**



**Deliver superior growth**

Fine Chemicals is focused on **delivering niche products to the generic pharmaceutical market** where it can apply its expertise to benefit from the trend towards the use of generic pharmaceuticals. Furthermore, with commercial advantages from being first to market with generic APIs, the division is supported by its strengths in research, development and manufacturing.

Through **leveraging synergies between research, development and manufacturing** across the division, Fine Chemicals can maintain a pipeline of new products for customers of both its API Manufacturing and Research Chemicals businesses.

**Increasing market share of established products** where the division has a strong position, such as opiate based APIs, is an important element of the strategy. The division is optimising its global manufacturing capacity to enable it to benefit from opportunities to strengthen its position in both existing and developing markets.

The division aims to **deliver superior growth** in markets that are driven by global trends towards the increased use of pharmaceutical products. Its strong position in niche areas and its research and manufacturing infrastructure position it well for growth at rates ahead of industry baselines.

### Description of the Business

Fine Chemicals Division supplies active pharmaceutical ingredients (APIs), fine chemicals and other speciality chemicals to a wide range of chemical and pharmaceutical industry customers and research institutes globally. Its products help relieve pain, treat cancer and alleviate other medical conditions, thus improving the quality of life for many people around the world. It comprises two areas:

#### API Manufacturing

Our API Manufacturing businesses supply APIs and intermediate products for the pharmaceutical and fine chemical

industries and provide contract research services to the pharmaceutical industry. Macfarlan Smith, based in Edinburgh, UK is the world's leading manufacturer of opiate alkaloids which are used for pain management and other pharmaceutical applications. Our US based Pharmaceutical Materials and Services business specialises in the manufacture of APIs for controlled drugs and for platinum based anticancer treatments. It also provides a full range of commercial scale manufacturing services for APIs to both generic and branded pharmaceutical companies.

#### Research Chemicals

The Research Chemicals business is a globally integrated supplier of speciality inorganic and organic chemicals and biochemicals. The business supplies chemicals into both industry and research institutions in small scale research quantities, via its catalogue, and bulk scale shipments. Around 50% of its sales are to pharmaceutical companies. It operates under the Alfa Aesar brand name and is based in the UK, USA, Germany, China and India. The operations in the UK and China have manufacturing capability servicing the catalogue and the needs of external bulk scale customers and provide custom synthesis of key pharmaceutical intermediates for both external and internal customers.

### Case Study



#### → Unlocking a Production Bottleneck to Save Money and Resources

Improving the efficiency of our processes is an essential part of our sustainability strategy to save resources. In Johnson Matthey's Pharmaceutical Materials and Services business an exercise to streamline operations at the West Deptford site in the US led to significant process improvement.

Employees from all functions were involved with Engineering, Production and Research providing the technical data, Production and Automation simplifying the programming and Commercial, Quality and Operations keeping external customers informed.

The project makes an important contribution to Sustainability 2017 and its goal of halving key resources per unit of output. The key resources here, which are production equipment time and energy use, have been more than halved. Furthermore, reduced manufacturing costs and increased overall production also contribute to the sustainability goal of doubling our underlying earnings per share.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

# Financial Review of Operations continued

## Fine Chemicals continued

### Performance in 2011/12

Fine Chemicals Division exceeded our expectations in 2011/12 with very strong growth in its API Manufacturing businesses and continued good growth in Research Chemicals. Revenue in the year increased by 15% to £292 million. Sales were 16% ahead at £285 million and operating profit was 24% higher at £69.7 million boosted by increased demand. In our North American API manufacturing operations we are beginning to realise the benefits of the acquisition of the Riverside facility in Conshohocken, USA in November 2010. The division's return on sales also improved, up 1.6% to 24.5%.

### API Manufacturing Businesses

The division's API Manufacturing businesses, which represent 72% of Fine Chemicals' sales, had a very good year with sales up 18% to £206 million and stronger growth in operating profit.

The businesses continued to benefit from the trend towards the use of generic APIs by the healthcare industry. Sales at Macfarlan Smith grew steadily this year, particularly due to higher demand for its bulk opiate based products, such as codeine which is used in pain management. Increased stability in narcotic raw material supplies allowed the business to recover market share in bulk opiates outside North America. The business also saw an improvement in operational efficiency as a result of a restructuring programme completed in the first half of the year.

Pharmaceutical Materials and Services performed very well this year, benefiting from the additional capacity afforded by the Riverside facility and some acquired legacy business. The new plant, which more than doubles our manufacturing capacity in North America, has been successfully integrated with the business' other US operations. This purpose built facility is enabling us to manufacture products more efficiently, allowing us to capitalise on new opportunities to grow sales and increase our market share, particularly in the supply of opiates used in pain management and amphetamines used in attention deficit hyperactivity disorder (ADHD) drugs. During the year we have focused on transferring technology to Riverside to optimise our API production in North America. Product transfer from Macfarlan Smith to Riverside is now also underway as the division works to optimise its API production globally.

The business also benefited from strong sales of the generic version of ADDERALL XR®, which is used in the treatment of ADHD, and from the launch of a niche, high value ophthalmic drug. Drawing on its manufacturing and contract research expertise and working in collaboration with generic pharmaceutical companies, the business has developed several other niche products that have been filed with the US Food and Drug Administration and which should support a steady stream of new products over the next few years.

The results of our API Manufacturing businesses also benefited from revenue from Endo, the US based healthcare company, relating to an oxymorphone patent.

### Research Chemicals

Research Chemicals performed well in 2011/12 benefiting from an increase in market share and the continued introduction of new products. Sales were 10% ahead of prior year at £79 million with good growth across North America, Europe and Asia. Operating profit grew ahead of sales. Sales growth in Asia was particularly strong, up 24% on prior year, supported by an increase in R&D spend by pharmaceutical companies in the region. The business has expanded its range this year, adding 4,500 new products, and its rate of new product introduction continues to increase. Our manufacturing capability, together with the strong synthetic chemistry expertise in Research Chemicals and more widely across Fine Chemicals Division, position the business well to further increase its portfolio of products.

In July 2012 the business launched a new biochemical product catalogue in North America, targeting the life science R&D market. This market offers opportunities outside North America and as a result the business plans to roll out its biochemical range to other regions in the coming year, supported by its global sales and manufacturing infrastructure.

## Case Study

### → Bitrex® Goes Social

Bitrex® is the world's bitterest substance. Discovered over 50 years ago by scientists at Macfarlan Smith, it is added to household and garden products to prevent children swallowing them by accident. Its bitter, unpleasant taste means that children will spit it out at once.

Bitrex® is not a replacement for the safe storage of dangerous household, garden and garage substances but where Bitrex® comes into its own is at moments of parental inattention. When the phone rings before the groceries are packed safely away or when another child needs some attention in the middle of spring cleaning, for example.

Now Johnson Matthey's Bitrex® team is adding a new approach to raising awareness of Bitrex® among consumers. The team has decided to use social media to reach out to parents around the world. They have produced a 60 second video which captures the uncanny skills that babies and toddlers have for spitting out a well-aimed jet of half-chewed food – an experience familiar to every parent, grandparent and carer! It concludes that spitting out is what babies and toddlers do best and Bitrex® is the stuff to ensure that if anything dangerous does get into their mouths, they will go right ahead and spit it out. The video can be viewed on the Bitrex® consumer webpage at [www.helpingprotectchildren.com](http://www.helpingprotectchildren.com).



 Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

# Financial Review

**Robert MacLeod**  
Group Finance Director



**“In 2011/12 the group’s underlying profit before tax increased by 23% to £426.0 million.”**

## Profit Before Tax

The group’s underlying profit before tax increased by 23% to £426.0 million (2010/11 £345.5 million). Profit before tax was 58% higher at £409.3 million (2010/11 restated £259.3 million). Items excluded from underlying profit were:

- amortisation of acquired intangibles of £16.7 million. This was £2.2 million higher than 2010/11 mainly due to a full year impact of the acquisition of the Additives business (formerly Intercat) made in November 2010; and
- in 2010/11, an impairment and restructuring charge of £71.8 million in respect of the closure of ECT’s manufacturing facility in Brussels and the Vertec business.

### Underlying Profit Reconciliation

	Year to 31st March 2012			Year to 31st March 2011		
	Profit before tax	Income tax expense	Profit from continuing operations	Profit before tax restated	Income tax expense restated	Profit from continuing operations restated
	£ million	£ million	£ million	£ million	£ million	£ million
Underlying basis	426.0	(100.0)	326.0	345.5	(91.7)	253.8
Amortisation of acquired intangibles	(16.7)	6.1	(10.6)	(14.5)	4.6	(9.9)
Major impairment / restructuring:						
Closure of autocatalyst facility in Brussels	-	-	-	(57.0)	8.1	(48.9)
Closure of Vertec business	-	-	-	(14.8)	3.5	(11.3)
Dissolution of associate	-	-	-	0.1	-	0.1
Reported basis	409.3	(93.9)	315.4	259.3	(75.5)	183.8

## Exchange Rates

The main impact of exchange rate movements on the group’s results comes from the translation of foreign subsidiaries’ profit into sterling as the group does not hedge the impact on the income statement or balance sheet of these translation effects. The group’s underlying operating profit at constant exchange rates is shown in the table below:

### Underlying Operating Profit

	Year to 31st March			2011 at 2012 exchange rates	
	2012	2011	%	2011 at 2012 exchange rates	%
	£ million	£ million	change	£ million	change
Environmental Technologies	211.8	164.7	+29	163.8	+29
Precious Metal Products	200.8	172.9	+16	172.7	+16
Fine Chemicals	69.7	56.2	+24	55.5	+26
Corporate	(32.2)	(27.6)		(27.5)	
<b>Total group</b>	<b>450.1</b>	<b>366.2</b>	<b>+23</b>	<b>364.5</b>	<b>+23</b>

During the year, sterling strengthened slightly against the US dollar but weakened slightly against the Chinese renminbi and the euro. Together these decreased reported group underlying operating profit for the year by £1.0 million.

## Financial Review continued

Of the group's underlying operating profit that is denominated in overseas currencies the average exchange rates during 2011/12 were:

	Share of 2011/12 non-sterling denominated underlying operating profit	Average exchange rate	
		2011/12	2010/11
US dollar	49%	1.597	1.555
Euro	25%	1.160	1.176
Chinese renminbi	8%	10.21	10.43

Going forward, each one cent change in the average US dollar exchange rate and each one cent change in the euro exchange rate have approximately a £0.9 million and £0.6 million effect respectively on underlying operating profit in a full year.

### Return on Sales

The group's return on sales increased from 16.1% to 16.8% as the group benefited from higher returns across all the divisions, as described on pages 26 to 42.

	Sales excluding precious metals		Return on sales <sup>1</sup>	
	2012 £ million	2011 £ million	2012 %	2011 %
Environmental Technologies	1,876	1,566	11.3	10.5
Precious Metal Products	582	541	34.5	31.9
Fine Chemicals	285	245	24.5	22.9
Less inter-segment sales	(64)	(72)	n/a	n/a
<b>Total group</b>	<b>2,679</b>	<b>2,280</b>	<b>16.8</b>	<b>16.1</b>

<sup>1</sup> Underlying operating profit divided by sales excluding precious metals.

### Return on Invested Capital

For the second consecutive year, the group's return on invested capital (ROIC) improved significantly, from 19.4% to 22.3%. Underlying operating profit was £83.9 million higher than last year at £450.1 million and average invested capital was £131 million higher at £2,015 million. At 22.3%, the group's ROIC is well ahead of our pre-tax cost of capital, which we estimate to be 11.2%.

Our target for several years has been to achieve a group ROIC above 20% on a pre-tax basis. This year we have achieved this goal.

Looking forward, whilst we will seek to continually improve the group's returns, we will not do this at the expense of the long term future of the group. We will continue to invest in capital expenditure in our businesses across the world and in research and development. Therefore, whilst further improvements in the group's ROIC may be possible, our objective is to maintain the group's ROIC at a minimum of 20%.

### Return on Invested Capital

	Average invested capital <sup>1</sup>		Return on invested capital <sup>2</sup>	
	2012 £ million	2011 restated £ million	2012 %	2011 %
Environmental Technologies	1,492	1,434	14.2	11.5
Precious Metal Products	341	309	58.9	55.9
Fine Chemicals	418	409	16.7	13.7
Corporate / other	(236)	(268)	n/a	n/a
<b>Total group</b>	<b>2,015</b>	<b>1,884</b>	<b>22.3</b>	<b>19.4</b>

<sup>1</sup> Average of opening and closing segmental net assets as shown in note 1 on the accounts on pages 131 and 132. For the group, the average of opening and closing equity plus net debt.

<sup>2</sup> Underlying operating profit divided by average invested capital.

### Interest

The group's net finance costs increased by £3.4 million to £24.1 million as a result of higher precious metal borrowing costs.

Approximately 73% of the group's net debt at 31st March 2012 has fixed interest rates averaging approximately 4.9%.

### Taxation

The group's total tax charge for the year was £93.9 million, a tax rate of 22.9% on profit before tax (2010/11 restated 29.1%).

The effective tax rate on underlying profit before tax reduced from 26.5% last year to 23.5%. This reduction was due to the resolution of certain open years' tax positions, a reduction in the headline rate of corporation tax in the UK and other factors.

A substantial proportion of the group's operating profit is earned in countries other than the UK. However, for tax purposes the parent company, which is UK tax resident, charges overseas legal entities for the use of patents, know how and technologies developed in the group's UK R&D centres, in addition to charging overseas subsidiary companies for the cost of UK based management and UK provided finance. These charges are required under UK transfer pricing legislation. As a result of these charges, the amount of the group's profit that is subject to UK corporation tax is particularly pronounced. The group has therefore materially benefited from the reduction in the headline UK corporation tax rate from 28% for the year ended 31st March 2011 to 24% for the year ending 31st March 2013.

In addition, further planned reductions in the headline UK corporation tax rate to 22% for accounting periods beginning on or after 1st April 2014, the proposal announced by the UK government to reduce the corporation tax charged on profit earned from qualifying patented technologies to 10% and the proposed favourable changes to the UK Controlled Foreign Companies tax legislation, both effective for the year ending 31st March 2014, should help to reduce the group's effective tax rate further. However, the UK government's proposal to introduce an 'above the line' R&D credit regime with effect from 1st April 2013 will increase the group's reported effective tax rate on underlying profit. Going forward, the rate should nevertheless be at least 2% lower than the headline rate for UK corporation tax.

### Tax Strategy

In 2011/12, Johnson Matthey had operations in over 30 countries across the world. For each country in which we have operations, we organise our operations to pay the correct and appropriate amount of tax at the right time according to the laws of the relevant country and ensure compliance with the group's tax policies and guidelines. The group's tax strategy is annually reviewed and endorsed by the board. This strategy is executed by a global team of tax professionals, assisted by external advisers where appropriate.

Our tax strategy covers the application of all taxes, both direct and indirect, to our business including corporation tax, payroll taxes, value added tax and customs duties. The tax strategy also covers our approach to any tax planning required by the business and key policy areas such as transfer pricing.

### Earnings per Share

The growth in the group's underlying earnings per share of 29% to 153.7 pence benefits both from growth in the business and the lower effective tax rate. Total earnings per share were 148.7 pence, 75% up on last year.

### Dividend

If the proposed final dividend of 40.0 pence per share is approved, the group's dividend for the full year will be 55.0 pence (2010/11 46.0 pence). At this level, the dividend would be covered 2.8 times by underlying earnings per share.

This year, the board is also recommending a special dividend of 100.0 pence per share following a review of the group's capital structure, as detailed on page 46.

### Pensions

#### IFRS – Accounting Basis

At 31st March 2012 the group's principal defined benefit pension scheme in the UK was in deficit by £84.8 million (92% funded) on an IFRS basis compared with a deficit of £60.6 million at 31st March 2011. The £24.2 million increase in the deficit was principally due to a decrease in the discount rate used to value the scheme's liabilities. Worldwide, the group has other similar defined benefit pension arrangements, some of which are in deficit (total deficit £45.9 million) and others which are in surplus (total surplus £2.0 million).

Worldwide, including provisions for the group's post-retirement healthcare schemes, the group had a net deficit of £169.4 million on employee benefit obligations at 31st March 2012 (2011 £130.4 million).

The impact of the higher deficit and lower discount rate is expected to increase the accounting charge for pensions in 2012/13 compared with 2011/12 by more than £10 million.

#### Actuarial – Funding Basis

In 2010/11 the company commenced deficit funding contributions to the UK scheme under a ten year recovery plan agreed with the Trustees following the 2009 actuarial valuation. During the year the company made deficit funding payments of £23.1 million to the scheme. The group's normal ongoing contribution to the UK scheme in 2011/12 was £21.6 million (2010/11 £22.0 million), making total cash contributions to the scheme in the year of £44.7 million.

The latest actuarial valuation of the UK scheme, effective as at 1st April 2012, is underway. The previous actuarial valuation, as at 1st April 2009, estimated that the scheme deficit was £173 million. The results of this latest actuarial valuation are not expected to be available until later this year, however it is anticipated that the scheme's deficit will have increased further despite the deficit funding contributions made since 2009. This increase is caused by a reduction in gilt yields that are used to value the scheme's liabilities. Once the results of the latest valuation are available, the company will enter into discussions with the scheme's Trustees to agree a revised deficit recovery plan. This may require the company to increase and / or extend the level of cash contributions.

In addition to the expected increase in the scheme's actuarial deficit, the cash cost of providing the ongoing benefits to existing members is likely to increase substantially. As a result, the company is reviewing its options for future pension provision in the UK.

The group operates other defined benefit pension schemes for some overseas employees. Certain of these schemes also have actuarial deficits which require additional cash contributions and where the ongoing costs associated with future pension provision is also increasing. The group intends to review those pension arrangements in due course.

The company continues to work with the fiduciary committees and trustee boards of each of its pension schemes worldwide to ensure an appropriate investment strategy is in place, which includes de-risking the schemes as funding levels improve. Currently, 52% of the group's total pension assets are held in government or corporate bonds.

### Capital Expenditure

Capital expenditure was £149.6 million (of which £150.7 million was cash spent in the year) which equated to 1.2 times depreciation. In the year, £97.1 million, or 65%, was incurred by Environmental Technologies Division with the principal investments being to add a further autocatalyst line in China, to increase our heavy duty diesel catalyst manufacturing capacity in Europe and China and to continue the investment started last year in new manufacturing plants in the UK and India to make process catalysts for our Ammonia, Methanol, Oil and Gas business.

The long term outlook for the group remains robust and there are good opportunities for growth. To access these opportunities we anticipate that capital expenditure will rise substantially during 2012/13, to around £230 million, and will be in the range of 1.5 to 1.7 times depreciation for the next few years. Depreciation, which was £126.1 million in 2011/12 (2010/11 £123.2 million), will rise as a consequence of this increased investment to around £135 million in 2012/13 and then further, to around £160 million, by 2014/15.

### Cash Flow

During the year ended 31st March 2012 net cash flow from operating activities was £464.4 million (2010/11 restated £122.9 million). The demand for our products grew but towards the end of the year precious metal prices dropped due to concerns about the global economy. Working capital, excluding the element that relates to precious metals, increased by £41.5 million, which represented 54 days of sales, down from last year's 60 days. Working capital in respect of precious metals decreased by £60.9 million primarily due to the lower precious metal prices towards the end of the year.

The group's free cash flow was an inflow of £299.4 million (2010/11 restated an outflow of £26.5 million).

## Financial Review continued

### Capital Structure

In the year ended 31st March 2012 net debt fell by £185.2 million to £454.2 million and the group's EBITDA (on an underlying basis) rose by 18% to £576.2 million (2010/11 £489.4 million). Net debt / EBITDA for the year was 0.8 times but if post tax pension deficits of £97.0 million are included within net debt, the ratio would increase to 1.0 times. Interest cover (underlying operating profit / net finance costs) was 18.7 times (2010/11 17.7 times).

Over the last few years, the group has performed very well, substantially growing underlying profit despite considerable capital expenditure and increased investment in research and development. The group's cash generation has also been strong.

As a result of this strong performance the board has carried out a review of the group's balance sheet structure. The outlook for the group remains strong and we believe that it has ample resources to fund forecast capital expenditure and a further increase in research and development. The board is, therefore, recommending a special dividend to shareholders of 100.0 pence per share, which represents a total payment of approximately £212 million. The special dividend will be accompanied by a share consolidation. The consolidation factor will be announced to shareholders in the annual general meeting circular on 20th June 2012.

In order to enable the group's objective of delivering long term growth to its shareholders, it is imperative that the company has sufficient funds to invest in capital expenditure, research and development and appropriate acquisitions whilst at the same time maintaining a balance sheet structure that safeguards the group's financial strength through economic cycles.

The group is subject to potentially large working capital swings as business activity changes. In particular, Emission Control Technologies has a substantial working capital requirement as business activity increases. These swings can be accentuated by volatility in precious metal prices. As a result of these factors, it is appropriate to run the business with a modest amount of debt. We believe that a net debt (including post tax pension deficits) to EBITDA ratio of around 1.5 to 2.0 times is appropriate for the group over the longer term.

If the special dividend is approved by shareholders, the net debt (including post tax pension deficits) to EBITDA ratio for the year ended 31st March 2012 would have been, on a pro forma basis, 1.3 times. The company will also, as required, have discussions with the UK pension scheme's Trustees regarding this return of capital as part of the current actuarial valuation.

### Borrowings

	31st March 2012		31st March 2011	
	£ million	%	£ million	%
Five to ten years	83.5	14	181.0	24
Two to five years	218.9	37	330.4	44
One to two years	198.7	33	40.6	5
Within one year	92.2	16	206.3	27
Gross borrowings (net of swaps)	593.3	100	758.3	100
Less: cash and deposits	139.1		118.9	
<b>Net debt</b>	<b>454.2</b>		<b>639.4</b>	

# Treasury Policies

## Financial Risk Management and Treasury Policies

The group uses financial instruments, in particular forward currency contracts and currency swaps, to manage the financial risks associated with its underlying business activities and the financing of those activities. The group does not undertake any speculative trading activity in financial instruments. Our treasury department is run as a service centre rather than a profit centre.

### Interest Rate Risk

At 31st March 2012 the group had net borrowings of £454.2 million. Some 73% of this debt was at fixed rates with an average interest rate of 4.9%. The remaining 27% of the group's net borrowings was funded on a floating rate basis. A 1% change in all interest rates would have a 0.3% impact on underlying profit before tax. This is within the range the board regards as acceptable.

## Foreign Currency Risk

Johnson Matthey's operations are located in over 30 countries, providing global coverage. The significant amount of its profit is earned outside the UK. In order to protect the group's sterling balance sheet and reduce cash flow risk the group has financed most of its investment in the USA and Europe by borrowing US dollars and euros respectively. Although much of this funding is obtained by directly borrowing the relevant currency, a part is achieved through currency swaps which can be more efficient and reduce costs. To a lesser extent the group has also financed a portion of its investment in China, Japan and South Africa using currency borrowings and swaps. The group uses forward exchange contracts to hedge foreign exchange exposures arising on forecast receipts and payments in foreign currencies. Currency options are occasionally used to hedge foreign exchange exposures, usually in a bid situation. Details of the contracts outstanding on 31st March 2012 are shown on page 155.

## Precious Metal Prices

Fluctuations in precious metal prices can have a significant impact on Johnson Matthey's financial results. Our policy for all manufacturing businesses is to limit this exposure by hedging against future price changes where such hedging can be done at acceptable cost. The group does not take material exposures on metal trading.

All the group's stocks of gold and silver are fully hedged by leasing or forward sales. Currently the majority of the group's platinum stocks are unhedged because of the lack of liquidity in the platinum market.

# Liquidity and Going Concern

The group's policy on funding capacity is to ensure that we always have sufficient long term funding and committed bank facilities in place to meet foreseeable peak borrowing requirements. At 31st March 2012 the group had cash and deposits of £139.1 million and £312.1 million of undrawn committed bank facilities available to meet future funding requirements. The group also has a number of uncommitted facilities, including overdrafts and metal lease lines, at its disposal.

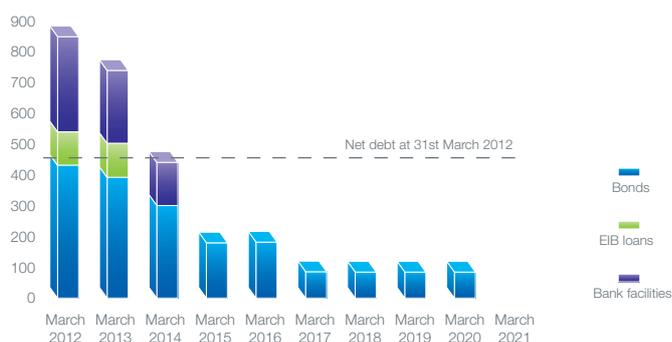
Gross borrowings (net of related swaps) of £593.3 million at 31st March 2012 included £539.1 million of debt arranged under long term bond issues and long term funding from the European Investment Bank (EIB). Of this, only £40.0 million falls due to be repaid in the 15 months to 30th June 2013 (the going concern period). The group's committed bank facilities have a range of maturities with £191.3 million expiring after 30th June 2013. The maturity dates of the group's debt and borrowing facilities are illustrated in the table on page 46 and the chart to the right. In the context of our policy on funding capacity, to take account of the proposed special dividend of approximately £212 million, we are in the process of arranging additional long term financing arrangements.

The directors have assessed the future funding requirements of the group and the company and compared it to the level of long term debt and committed bank facilities for the 15 months from the balance sheet date. The assessment included a sensitivity analysis on the key factors which could affect future cash flow

and funding requirements. Having undertaken this work the directors are of the opinion that the group has adequate resources to fund its operations for the foreseeable future and so determine that it is appropriate to prepare the accounts on a going concern basis.

## Maturity Profile of Debt Facilities

At 31st March 2012 exchange rates  
£ million



**Investing in  
our people  
and our  
communities  
around the  
world**





- Children in India participate in 'Healthy Body Healthy Mind', a programme sponsored by Johnson Matthey and which is run by the charity Peace Child India.

- Students from a local school visit Johnson Matthey's platinum group metals refinery in Brimsdown, UK.

# Social

This section highlights initiatives involving our people, our communities and other stakeholder groups. It also contains performance data relating to employees and community investment.

## Contents

- 50 Performance Summary
- 50 Stakeholder Engagement
- 52 Building a Sustainable Workforce
- 56 Community Investment
- 58 Social Aims and Targets



## Delivering Value



### → Growing Our People

It is Johnson Matthey's people that make the company successful and it is their knowledge, expertise and contributions that drive the business forward.

Developing our employees and providing an environment which motivates them to contribute and stay with the company is fundamental to the group's long term performance. At Johnson Matthey we aim to provide interesting and challenging jobs to grow our people personally and professionally in a supportive culture where everyone is encouraged to reach their full potential.

Our learning and development strategy has always included a balance of workplace based experience, personal development support and feedback, as well as more structured training programmes to build employees' skills and encourage collaboration and networking with their colleagues across the group.

During 2011/12 we have introduced a number of new global and regional programmes aimed at introducing new graduates to the business, developing our manufacturing personnel and building leadership capacity in our major regions. We are continuing to refresh and expand our people development activities on a global basis to support future growth and the increasing global reach of our business.

# Social

## Performance Summary

		2012	2011
Average number of employees		<b>9,914</b>	9,388
Total employee turnover <sup>1</sup>	%	<b>11.7</b>	8.5
Voluntary employee turnover <sup>1</sup>	%	<b>6.4</b>	5.6
Employee gender (female) <sup>2</sup>	%	<b>22</b>	22
Gender of new recruits (female)	%	<b>25</b>	23
Trade union representation	%	<b>35</b>	38
Training days per employee		<b>3.1</b>	2.6
Training spend per employee <sup>3</sup>	£	<b>335</b>	390
Internal promotions	% of all recruitment in year	<b>35</b>	33
Attendance	days lost per employee	<b>5.0</b>	5.2
Charitable donations	£ thousands	<b>645</b>	517

<sup>1</sup> Employee turnover is calculated by reference to the total number of leavers during the year expressed as a percentage of the average number of people employed during the year. The analysis does not include agency workers not directly employed by Johnson Matthey.

<sup>2</sup> At 31st March.

<sup>3</sup> Training spend does not include the cost of in house training or the cost of employees' wages during training.

In Johnson Matthey there is a strong tradition of looking after our employees, of good community relations and of interaction with and responsiveness towards our stakeholders. We recognise that in order to operate in a socially sustainable manner, our actions and our policies must be focused on the long term benefits to employees, suppliers, customers, communities and other stakeholders.

→ Read more on our social policies in the Governance section on pages 79 to 81.



Visit our website for full details of our social activities and policies at [www.matthey.com](http://www.matthey.com).

## Stakeholder Engagement

Johnson Matthey has a wide range of stakeholders with an interest in hearing from or working with the company at both a corporate and business level. Our stakeholders include any person or organisation that may interact with, or have an interest in, Johnson Matthey and include customers, employees and their representatives, suppliers, fund managers, shareholders, communities, governments, non-governmental organisations (NGOs) and national and international trade associations. The company is also engaged with national and local government to inform the development of policy in areas where our technology and products can play a pivotal role. Johnson Matthey meets regularly with its major shareholders, as described in the Corporate Governance Report on pages 98 and 99, to discuss the performance and development of the group's businesses, including matters relating to sustainability and corporate social responsibility.

We aim to provide meaningful and transparent communications to meet the needs of all stakeholder groups and deliver information to them in the most appropriate format. These formats may include annual performance reports, participation in performance indices (Carbon Disclosure Project, FTSE4Good, for example) or one to one discussions on specific topics. In March 2012 the company launched its new corporate website. The site has been developed to provide more in depth information for all stakeholder groups with enhanced navigation to enable users to find the information they need more quickly. We communicate with our stakeholders throughout the year and engagement is integrated into our business decision making processes. This 360 degree dialogue is essential in providing all parties with a rounded view of all material issues and helps all to shape their actions and strategies to move forward on these matters. For further details on our stakeholder engagement activities, including a stakeholder map, visit the company's website at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

## Developments in 2011/12

We have continued to see evidence this year of the increasing importance of governance matters in our supply chains and have completed a number of questionnaires received from our customers and suppliers regarding our environmental, social and ethical practices.

We remain actively involved with the key trade associations and industry organisations that are connected with our business activities as an effective way of understanding, shaping, participating and contributing to a range of discussion areas relevant to the company's stakeholders, and those of the broader industry and market sectors in which we operate.

Our involvement and discussions may cover areas such as climate change, emerging regulation, legislation, health and safety, standards and guidance. Emerging issues that may have a material impact on our industry sectors are also carefully considered. Examples of our involvement are illustrated in the following case studies.

## Case Study

Stakeholder Engagement in Action

### → The Chemical Industries Association

Johnson Matthey is a member of the UK Chemical Industries Association (CIA) and a number of our senior managers and specialist advisers participate in CIA networks and working groups. Following the development last year of the CIA sustainable health metrics indicator tool, which was piloted globally in Johnson Matthey and has been integrated into our health improvement programmes, the CIA has now published the final version of the scorecard. It has been made available to member companies through launch events and the CIA has plans to roll it out to a wider audience for more general use by the chemical and other industries. The scorecard underpins the leading metrics for the UK CIA's sustainable development goals set in 2010 for 2020. It will allow the CIA to identify whether member companies have the correct level of health programmes in place and track / encourage further improvement.

We have also continued to support the CIA's Responsible Care® programme as a peer reviewer to verify other member companies.

## Case Study

Stakeholder Engagement in Action

### → The Prince of Wales's Corporate Leaders Group on Climate Change

Johnson Matthey is a founder member of the Prince of Wales's Corporate Leaders Group (UK CLG) on Climate Change, working closely on climate change issues with 17 other leading UK businesses. UK CLG members share our belief that there needs to be clear, ambitious and long term policies in place in order to mitigate the effects of climate change. As a member of the UK CLG we helped to shape the influential Copenhagen Communiqué which has now been signed by almost 1,000 companies around the world. In June 2011 the UK CLG published 'Seize the Day', a new report into government policy, that calls for stronger action on climate leadership. In May 2012 it launched 'Down to Zero', a collaboration with UK government's Department for Business, Innovation and Skills, that will bring public and private companies together in procurement compacts to deliver progressively lower carbon goods and services into the market.

## Case Study

Stakeholder Engagement in Action

### → The International Platinum Group Metals Association

Johnson Matthey has continued its work with the International Platinum Group Metals Association (IPA) whose membership comprises major primary platinum group metal (pgm) mining companies and fabricators accounting for some 80% of annual pgm supply. The IPA is engaged in developing a sustainability strategy for the pgm industry and Johnson Matthey leads its sub-committee responsible for achieving sustainability strategy outcomes.

During the last 12 months we have helped the IPA to develop a programme for a life cycle inventory study which aims to measure the environmental burdens and benefits of producing and using platinum group metals. The study is projected to cover the entire life cycle of the metals from primary extraction through refining, fabrication, use and recycling. It is intended to be used for the internal benchmarking of the environmental performance of the pgm industry.

## Case Study

Stakeholder Engagement in Action

### → Pgm Health Science Research Group

In response to interest from our stakeholders and as part of our voluntary product responsible care efforts, Johnson Matthey has continued to fund and participate in the Pgm Health Science Research Group (HSRG), an industry sector organisation which aims to improve the quality of existing risk assessments for the pgms and their applications, for example in autocatalysts. During the year HSRG's research programmes have delivered new information relevant to risk assessments and in the interests of transparency, these findings continue to be published in appropriate peer reviewed science journals.

## Social continued

### Building a Sustainable Workforce

Recruiting the right people, developing them and providing an environment which motivates them to contribute and stay with the company is fundamental to the group's long term performance. At Johnson Matthey, our employees are respected as the group's most valuable resource and play a vital role in building a sustainable business. Their skills, qualities and wellbeing underpin the company's success.

We recognise that our people and culture are a particular strength and, although the culture of an organisation is not easy to define, there is a distinctive culture in Johnson Matthey, irrespective of division, business, function or geographic location. Capturing and drawing on the strengths of our culture will support the group's future growth, particularly as it continues to expand globally. During the year work commenced to better articulate our company values and explore how they can be best used to develop and grow our business and our people.

### Recruitment and Retention

Johnson Matthey has effective recruitment processes to support the regular requirement for high calibre employees. Increasingly, we are recruiting graduates and qualified employees from beyond our traditional bases in Europe and North America as we continue to develop a more internationally diverse workforce to support our global business.

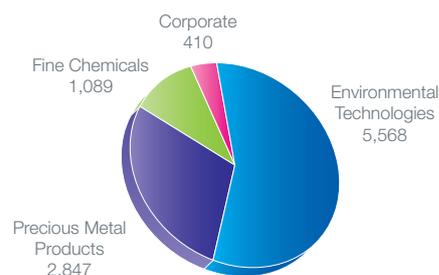
Recruiting well qualified staff is vital to support business development, particularly in new and emerging markets such as in Asia, and this is achieved by appropriate manpower planning, local recruitment and the encouragement of international and cross divisional mobility. It is the group's policy to promote from within wherever possible and in 2011/12 35% of vacancies were filled by internal candidates, supporting the retention of employees and developing their careers.

During the year we have improved our online global recruitment systems for external candidates, including the launch of a new application management system for recruitment into our UK businesses.

We have also reviewed the careers section of the company's website and continue to develop it with a focus on increasing awareness of the company and candidate attraction. There are also plans to expand our activities via key social media channels to further support our global recruitment activities.

The average number of employees has increased by 6% this year with continued growth in average employee numbers in Asia (up 11%) and a 9% increase in North America. As illustrated in the pie chart below, Environmental Technologies remains the group's largest division with over 50% of employees. In 2011/12, average employee numbers increased across all divisions.

**Total Employees by Division**  
Average headcount for 2011/12



## Case Study

### → Employer of Choice in Malaysia

What do Apple Days, teddy bear sales and the acquisition of new work skills have in common? The answer, from the Emission Control Technologies site at Nilai, Malaysia is that these are all elements in its community, welfare and training activities. The site's proactive approach to community participation, together with its employee health and training programmes, have earned it the Employer of Choice 2011 award. The awards were organised by the Malaysian Institute of Human Resources and Jobstreet.

Initiatives at the site have included donations of old office furniture to a school in a disadvantaged area and teddy bears to a local hospital. Programmes to support employees' wellbeing and development are equally prominent. Activities related to healthier lifestyles include a health monitoring programme and 'Apple Days' which are held twice a week to promote healthy eating. A large capital investment project is underway at the Nilai site and as the day to day jobs of employees change, training will be given to enable them to develop their skill sets.

This mix of community involvement, concern for employee health and wellbeing and training to meet the needs of a changing industry makes Johnson Matthey an employer of choice in Malaysia.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

# Case Study

## → Encouraging our Future Scientists

Many Johnson Matthey sites have educational links with their local communities. The Future Scientist Programme, developed by employees at Johnson Matthey's Billingham site in the north east of England has firmly grasped the issue of awakening pupil interest at an early stage in their secondary education to help direct children with talent towards a career in science.

The programme builds on the site's ten years' of experience working with primary school children and takes the form of three lessons, including a practical session, all given by Johnson Matthey employees.

In all, 360 children at St Michael's, the local secondary school, have so far participated in the programme, with 12 teachers involved in the codevelopment and implementation. The feedback from pupils and teachers has been extremely positive. As one of the youngsters said, *"I had not thought about a job in industry before, but I am now."*

Following on from the launch, a group from the Future Scientist Programme visited the House of Commons in the UK in January 2012 to explain the initiative and gain wider support for the programme amid an audience of industry professionals, Members of Parliament and government representatives.



 Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

### Average Number of People Employed

Average headcount 2011/12

Region	Permanent employees	Temporary contract employees	Total
Europe	4,868	174	5,042
North America	2,839	13	2,852
Asia	1,344	63	1,407
Rest of World	611	2	613
<b>Total group</b>	<b>9,662</b>	<b>252</b>	<b>9,914</b>

### Annual Change in People Employed

Net change between 31st March 2011 and 31st March 2012

Region	Permanent employees	Temporary contract employees	Total net change
Europe	+145	+10	+155
North America	+271	-29	+242
Asia	+107	+28	+135
Rest of World	-8	+2	-6
<b>Total group</b>	<b>+515</b>	<b>+11</b>	<b>+526</b>

### Employee Turnover by Region

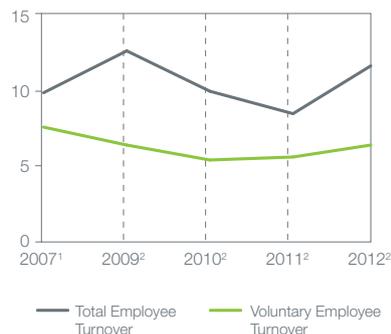
2011/12

Region	Total leavers	Employee turnover	Voluntary employee turnover
Europe	592	12.2%	4.8%
North America	226	8.0%	4.7%
Asia	243	18.1%	14.9%
Rest of World	65	10.6%	8.5%
<b>Total group</b>	<b>1,126</b>	<b>11.7%</b>	<b>6.4%</b>

Maintaining the quality of our employee relations is a priority for the company and Johnson Matthey is proud of the high level of commitment and loyalty from its people. We have a low voluntary staff turnover, 6.4% in 2011/12 (2010/11 5.6%), with many employees staying with the company for their whole careers. Total employee turnover increased this year from 8.5% to 11.7% as a result of the closure of our site in Brussels, redundancy programmes in South Korea and more proactive performance management in a number of other countries. The table below sets out employee turnover in 2011/12 by geographical region. The employee turnover figure is calculated by reference to the total number of leavers during the year expressed as a percentage of the average number of people employed during the year. The analysis does not include agency workers not directly employed by Johnson Matthey.

### Employee Turnover

%



<sup>1</sup> Calendar year.  
<sup>2</sup> Financial year.

The group's employee turnover over the past five years is illustrated in the graph below and shows that voluntary employee turnover has remained steady.

Good performance in attendance rates was maintained this year. The average number of days lost per employee in 2011/12 due to sickness absence was 5.0 days (2010/11 5.2 days). This represents 2.0% of lost time per employee in the working year, a slight improvement on last year. We continue to invest in sustainable health and wellness programmes to support the longer term health, wellbeing and performance of our employees.

### Training and Development

The knowledge, expertise and contributions of our employees is what drives the business forward and as a result, employee development is a key element of Johnson Matthey's strategy for future growth. We offer training and development programmes at career foundation and management levels which seek to offer a broad understanding of the group's businesses, give a strong base in the company's strategy, culture and ethics and provide direct contact and networking opportunities with peers and senior managers across international boundaries. Our programmes are aimed at developing our talented people, encouraging commitment to the company and building high level skills and competences.

## Social continued

We are continuing to increase our focus on learning and development across the group and are expanding activities and resources on a global basis. Our sustainability awareness training has been rolled out in our major regions and we are developing a more in depth induction programme which will be launched in 2012/13. A number of new programmes have been introduced during the year, both across the group and within our businesses, underpinned by our key themes of acting globally, people and culture, sharing good practice and increasing business understanding. We have particularly increased our focus on management and leadership development and on coaching and mentoring to support and develop our staff.

The group's Manufacturing Excellence programme, which was launched in 2011/12, places particular emphasis on developing our manufacturing leaders and on providing our manufacturing staff with improvement tools to implement and embed a culture of lean manufacturing. Specific training modules are being developed to target key employee groups and encourage the sharing of best practice across our global manufacturing operations.

Talent reviews and succession planning are instrumental throughout our businesses and we have robust review processes in place to support the international recognition and development of management talent within the group.

### Training Days and Spend on Training

2011/12

Region	Total days / shifts training	Number of days / shifts training per permanent employee	Total training spend £ thousands	Spend per permanent employee £
Europe	15,140	3.1	2,021	415
North America	6,043	2.1	527	186
Asia	4,543	3.4	490	365
Rest of World	3,947	6.5	197	322
<b>Total group</b>	<b>29,673</b>	<b>3.1</b>	<b>3,235</b>	<b>335</b>

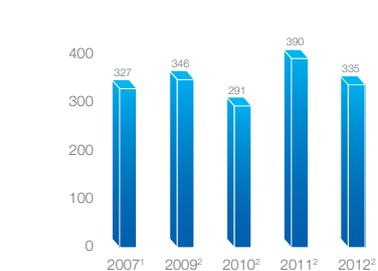
In 2012/13 a new development programme aimed at senior leaders in Johnson Matthey will be introduced which will provide world class development support to further build leadership capacity in line with our strategy for growth.

Johnson Matthey is a strong supporter of apprenticeship schemes as a valuable route for training and developing new talent. Programmes operate at a number of our facilities around the world and during 2011/12 several of our businesses have introduced or expanded their schemes. In the UK this year, the company and its apprentices have received recognition from government and other organisations for their commitment and contribution to apprenticeship schemes.

The table above sets out, on a total and on a per employee basis, the days of training and training spend during 2011/12.

The figure below shows the total training spend per employee over the past five years. The training spend does not include the cost of in house training or the cost of employees' wages during training.

### Total Training Spend per Employee



<sup>1</sup> Calendar year.

<sup>2</sup> Financial year.

## Case Study



### → Continuing the Tradition of Apprentices

Johnson Matthey has a long tradition of apprenticeships. In fact, George Matthey, one of the founders of the company, started his career as an apprentice at the age of 13 back in the 19th century. Today, programmes operate at many Johnson Matthey facilities around the world and focus on a range of skills and disciplines.

At our Zurich sales office in Switzerland, which runs an apprenticeship scheme to give three young people three years' commercial training, apprentices work alongside the other 26 Johnson Matthey employees there and learn a wide range of office based skills. Our Brimsdown refinery, in the London borough of Enfield, UK, reintroduced its apprenticeship programme in 2010 and provides training in engineering disciplines. The site has since gone on to encourage other local businesses to do the same and has gained support and recognition for its efforts from several UK politicians.



Read the full case studies at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).



- Employees and their families at our Nilai operations in Malaysia enjoy an 'environment, health and safety' treasure hunt organised by the site.

- Volunteers from Johnson Matthey's Emission Control Technologies business in Royston, UK helped out at the local train station to create floral displays for the town's 'Royston in Bloom' event.

The level of training activity across the group has risen this year as indicated by an increase in the number of days / shifts training per employee which is up from 2.6 in 2010/11 to 3.1 in 2011/12. Although the group's overall external training spend per employee has decreased this year, spend per employee in Asia has more than trebled, reflecting the increased focus on employee development in the region. Our strong and continuing commitment to the training and personal development of all our employees is reflected in the fact that during 2011/12, approximately 690 internal promotions were actioned. This represents 35% of all appointments made in the year.

### Diversity

At Johnson Matthey we recognise the importance of diversity, including gender diversity, and the benefits this can bring to our organisation. With regard to gender diversity specifically, Johnson Matthey faces challenges similar to those faced by other organisations in the chemical, technology and manufacturing sectors. To address these, we have policies and processes in place which are designed to support gender diversity in employee recruitment, development and promotion and we are committed to ensuring that women have an equal chance with men of developing their careers within our business.

We encourage gender diversity at the early career stage by working outside Johnson Matthey to encourage women to enter scientific and industrial fields. The board is in the process of reviewing the broad question of diversity within the group.

In accordance with applicable law, Johnson Matthey bases all employment related decisions on the principles of equal employment opportunity and our policies in this area are presented on page 81 and the website.

The group's gender balance was unchanged this year at 78% male and 22% female although the gender balance of new recruits is improving at 75% male and 25% female.

### Employee Relations and Communication

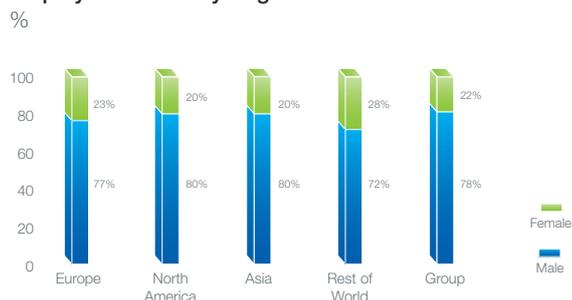
Effective two way communication with employees and, in particular, face to face dialogue, is important in embedding company culture, building commitment, celebrating achievements and increasing understanding of the business, its performance and strategy. Communication on matters of interest to employees is exchanged through in house magazines, attitude surveys, regular news bulletins, presentations to staff and team briefings. Employees are also encouraged to access the group's corporate intranet, sustainability intranet and websites.

Encouraging communication between employees is becoming increasingly important as Johnson Matthey continues to expand its range of business activities and its geographic locations. Encouraging better communication between our people will help to promote exchange of ideas and best practice, expedite research and development and support the embedding of corporate culture. Although our company operates as separate businesses within our three divisions, there are common activities and themes which run throughout the group. Our Manufacturing Excellence programme is one example where success is highly dependent on engagement and communication between employees. More generally, the group recognises the value of such exchanges and projects are underway to provide enhanced internal systems that support improved communication across our global operations.

Employee involvement is a critical factor in the development of an improvement culture. Employees at all levels are making a major contribution to the success of our many sustainability and lean manufacturing initiatives around the world which provide an excellent opportunity for staff engagement and development.

The company continues to support employee share ownership and employees have the opportunity to participate in share ownership plans, where practicable. Under these plans, employees can buy shares in the company which are matched by a company funded component. Employees in six countries are able to contribute to a company share ownership plan or a 401k approved savings investment plan. Through these ownership plans Johnson Matthey's current and former employees collectively held 1.77% of the company's shares at 31st March 2012.

### Employee Gender by Region



## Social continued

Johnson Matthey also sponsors pension plans for its employees worldwide. These pension plans are a combination of defined benefit and defined contribution pension arrangements, savings schemes and provident funds designed to provide appropriate retirement benefits based on local laws, custom and market practice.

Johnson Matthey continues to maintain good and constructive relations with all recognised trade unions which collectively represent 35% of all group employees worldwide (2010/11 38%). The following table sets out the average number and percentage of Johnson Matthey's employees who were covered by collective bargaining arrangements and represented by trade unions by geographical region in 2011/12. During 2011/12 no working time was lost within the group due to employee action.

### Trade Union Representation

Average headcount 2011/12

Region	Permanent employees	Represented	% represented
Europe	4,868	2,194	45%
North America	2,839	558	20%
Asia	1,344	306	23%
Rest of World	611	337	55%
<b>Total group</b>	<b>9,662</b>	<b>3,395</b>	<b>35%</b>

### Community Investment

Johnson Matthey has a strong tradition of good community relations and the company and its employees are actively involved in programmes worldwide. We believe that investing in our communities is an integral part of our social commitment to ensure the ongoing sustainable success of the company.

Although Johnson Matthey is a global company, we believe community investment is about making a real difference locally and making a positive impact in the communities where we have operations. We have an important contribution to make to the economic development of our local communities, not only as an employer but also through collaboration and investment, both financial and in kind, for example by volunteering and donating resources and expertise.

As we are global, the communities we operate in face a wide range of priorities, issues and challenges. As a result we aim to ensure that our sites have the resources and support to identify those projects, initiatives and partnerships that can make a real difference in their communities and that mean something to employees and their families. We also aim to support the future growth of our business through the promotion of science education among young people.

We have four key objectives for our community investment programmes:

- To demonstrate our commitment to being a responsible business that provides value beyond our products.
- To make a positive impact on the communities in which we operate.
- To create goodwill and enhance our reputation within our local communities.
- To build our profile as an employer of choice.

Guidance on site requirements for community relations is detailed in the group environment, health and safety management system and a review of community investment activities across the group is carried out each year. In 2011/12, the review indicates that 85% of Johnson Matthey's operations participated in activities within their local communities. These activities are wide ranging and include charitable giving, support for educational projects, the advancement of science and economic regeneration projects. The review also indicates that 95% of sites have a nominated person responsible for this area. Looking ahead to 2012/13, the review shows that 78% of operations have set objectives for their community investment activities with 65% having planned activities for the year.

## Case Study



### → Investing in the Local Community

Local Enterprise Partnerships are a scheme that was launched by the coalition government in England in 2011 to foster growth at a local level. Johnson Matthey is a leading business in Royston and so when the Hertfordshire Local Enterprise Partnership (LEP) was formed, it was natural that Johnson Matthey should be involved from the start. John Gourd, the Site Planning and Services Director at Royston, accepted a position on the initial board and, subsequently, the role of chairman.

The Hertfordshire LEP is a business led partnership between local businesses, academic institutions and local government which aims to boost the local economy and create new jobs.

In February 2012, the chairs of all 39 LEPs around the country, including John Gourd, were invited to meet the Prince of Wales and discuss the work of his charity, the Prince's Trust. Prince Charles was keen to understand how the LEPs could work with his charity to help young people, especially in areas of high unemployment.

Our participation in the local LEP is an extension of the Royston site's community engagement strategy and recognises the importance of playing our part in helping to strengthen the local economy.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

## Case Study

### → Volunteering in Ecuador

In October 2010, ten employees from Johnson Matthey's Davy Process Technology business set about raising £15,000 to enable them to support a community project in rural Ecuador to renovate a school and build a local nursery. After several fundraising events, generous donations and more office cake sales than the 'health' element of the sustainability programme ever envisaged, the team set off to Ecuador in July 2011.

Hosted by local Shuar families, the team was introduced to the distinctive Shuar culture and they were also able to share some UK traditions of their own. By the time the team left, the school buildings had been renovated and they were ready for use. All the wood needed for the building of the nursery had been collected. For the volunteers, it had been hard work but wholly rewarding and had given them the opportunity to show real concern for community wellbeing, whether that community is on the doorstep of the company or far away.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

The review also indicates that 68% of sites have specific budgets allocated to community investment activities for the 2012/13 financial year.

Employees also participate in activities or hold community related roles outside the work environment. The company is supportive of this broader community engagement, allowing employees time off during working hours as appropriate.

In efforts to further encourage volunteering among employees and to more broadly support our sites around the world in their community programmes, the group has developed a community investment strategy and policy this year. In developing the policy, Johnson Matthey sought input from a number of its employees, charity partners, shareholders and other experts to ensure the policy and strategy are relevant and deliver value for all stakeholders.

The policy requires all sites to undertake a community investment programme, measure its impact and allocate a budget for activities in the year. It also provides additional guidance to assist sites in developing their programmes. The policy also sets out the group's commitment to encouraging its employees and sites to support their local communities and charities. From the start of the 2012/13 financial year, every employee will be allowed up to two days paid leave a year to undertake voluntary work in the local community or with a charitable organisation (subject to business needs and the approval of their manager). Furthermore, the company will match employees' fundraising in aid of a registered charity up to the value of £1,000 per employee per year, with a cap of £50,000 per annum for the group as a whole.

## Case Study



### → Making a Difference in Sri Lanka

Johnson Matthey was swift to react, along with the global community, when the tsunami hit the Indian Ocean on 26th December 2004. The company made an initial donation and also made a commitment to maintain a relationship with young victims of the tsunami by making a donation of £3,000 a year over five years to support the education of children who had been orphaned. This money was earmarked for their school fees, supplies and extra classes, and was intended to help them to pursue their education.

In July 2011, Johnson Matthey's Chief Executive, Neil Carson, and his family visited one of the schools the company supports in Sri Lanka. He saw at first hand the impact of the funding and met some of the children who are sponsored, including one girl who is soon to become a doctor.

Having recently reached the final year of its original five year commitment, Johnson Matthey's Charities Committee agreed that the company should renew its commitment with a further five years of donations. As a result, the group will continue to support many of the same children, along with a handful of new students, with the aim of increasing the scope of opportunities for their future.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

## Social continued

### Charitable Donations

Johnson Matthey's long history of support for charitable causes continues today through group and business programmes. The causes we support reflect the areas in which the group's technologies have a benefit and the issues which strike a chord with our employees. In the financial year to 31st March 2012 Johnson Matthey donated £645,000 to charitable organisations, up 25% on the prior year. This figure only includes donations made by Johnson Matthey and does not include payroll giving, donations made by staff or employee time. The company made no political donations in the year.

Across the globe, Johnson Matthey's sites lend support to many charities locally and nationally through donations, employee time or loans of company facilities. Examples of these initiatives are summarised in the case study examples in this report with full details and further examples available on our website.



Read more online at  
[www.matthey.com/sustainability](http://www.matthey.com/sustainability).

At a group level, Johnson Matthey operates a charitable donations programme which represented 47% (£305,000) of total company donations in 2011/12. This programme supports organisations working in the areas of environment and sustainability, medical and health, science and education, social welfare and international development.

The charitable donations programme includes an annual donations scheme where a number of charities are selected triennially and receive a donation from the company each year for a three year period.

In 2011/12, 33 charitable causes received an annual donation through this scheme. The group's programme also considers individual requests for support throughout the year and a further 67 charitable organisations received donations on this basis in 2011/12. The group also has a specific programme of support focused on promoting the understanding and awareness of science among children and young people and has identified several new programmes which it will support in 2012/13.

The Johnson Matthey Educational Trust was set up in 1967 to commemorate the 150th anniversary of the founding of the company. It awards scholarships to support the university education of the offspring of Johnson Matthey's current and retired employees. During the year the Trust approved grants totalling £82,500.

The company continues to select a charity partner to focus support on one particular cause and employee views are considered when identifying the charity. The group is supporting CLIC Sargent, the UK's leading cancer charity for children and young people and their families, and other national childhood cancer charities around the world in a two year partnership that will run to the end of 2013/14.

Johnson Matthey is a member of the London Benchmarking Group (LBG), a global network of companies that share and drive best practice in corporate community investment.

### Social Aims and Targets

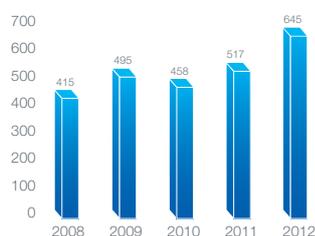
We will continue to improve our recruitment processes on a global basis to ensure that we are well placed to recruit high calibre employees in all our regions. Plans are underway to further develop our online presence and use digital media to enhance users' experience and encourage interest in our business.

Alongside our efforts on recruitment, employee training and development at all levels will remain a key priority to ensure we retain high potential and high performing staff and equip them with the technical and leadership capabilities needed to achieve the long term goals set out in our strategy. Plans are in place to launch a number of new training modules in 2012/13, including those to support the group's Manufacturing Excellence programme and leadership development in China.

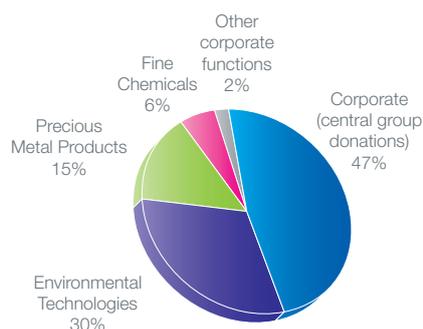
Community investment remains an important aspect of building a sustainable business and following the launch of the community investment strategy and policy, work will continue to support our operations around the world in developing their community programmes. We will also start to track additional performance metrics, for example employee volunteering days, with a view to reporting this data in future years.

### Charitable Donations

£ thousands

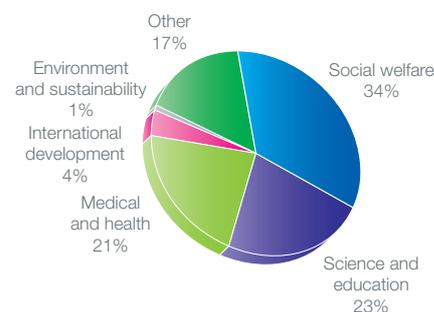


### Charitable Donations 2011/12



### Charitable Donations – Corporate (central group donations)

% of total (£305,000) donated by charitable type



## Case Study

### → Working Together to Support Children with Cancer

Every two years, Johnson Matthey selects a charity partner in the UK and centres its fundraising activities on that cause. Sites in other countries are encouraged to find and support a similar charity.

Johnson Matthey has chosen CLIC Sargent, a leading UK cancer charity, as its charity partner for 2012 to 2014. CLIC Sargent supports children and young people who have been diagnosed with cancer. It helps them and their families by providing clinical, financial and emotional support.

Funds raised go towards a range of services: financial support, free breaks for families, 'play' specialists who use play to help children understand the procedures involved, free self-catering accommodation close to specialist hospitals and more.

CLIC Sargent is affiliated to the International Confederation of Cancer Parent Organizations, which has member organisations on five continents. Johnson Matthey's operations around the world have been invited to get involved and support their local childhood cancer charity.

The company's charity partnership provides a focus for employee fundraising and the sums raised provide a very real support to the charity. In the previous partnership, over £70,000 was raised to support the British Heart Foundation.

 Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).



**Johnson Matthey**

Proudly supporting



## Case Study



### → Revitalising the Field of Dreams

The Field of Dreams is a recreational playground in West Deptford, New Jersey, USA. Once a fairyland of turrets, walkways and dedicated play areas, it was originally built by community volunteers in 1996. The park is close to Johnson Matthey's West Deptford site and employees themselves have used the park for family outings.

Time has, however, taken its toll and the Field of Dreams had become in need of repair, with its once colourful towers weather beaten and worn and the protective mulch ground down to bare dirt. It was in need of love.

Johnson Matthey, together with another local company, has come to the rescue with donations of much needed funds and with employees volunteering their time to restore the park to its former glory. The project was completed in May 2012 and Johnson Matthey's West Deptford site is proud to have been able to help realise the dreams of local children.

 Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

## A key priority

# Health and Safety

This section outlines our approach to health, safety and product stewardship, our performance in the year and the programmes we have in place to drive continuous improvement.

## Delivering Value



### → Investing in New Capacity

With ever increasing concerns over the availability of natural resources, countries around the world remain focused on ensuring their energy security and continue to seek to reduce their dependence on the use of imported oil.

In China, which has low natural gas reserves and lots of coal, there is particular interest in converting coal into substitute natural gas (SNG) and Johnson Matthey has leading technology and catalysts for this process.

Investments at our Process Technologies business' Panki site in India are increasing capacity for manufacturing SNG catalysts to meet demand from customers in China. Projects to construct new facilities are well underway and several upgrades to our existing assets have been completed. As well as boosting capacity, these upgrades have included a number of health and safety improvements to provide an enhanced working environment for our employees at Panki.



▪ Employees at Panki outside one of the new catalyst manufacturing facilities.



▪ Inside the control room of a recently completed facility at Panki.

## Contents

62	Performance Summary
62	Managing Performance and Driving Continuous Improvement
62	Health Performance in 2011/12
63	Sustainable Health Improvement Priorities for 2012/13
63	Safety Performance in 2011/12
64	Safety Priorities for 2012/13
64	Product Stewardship
65	Product Stewardship Performance in 2011/12
65	Product Stewardship Priorities for 2012/13
66	Animal Testing
67	Responsible Care
67	Regulatory Matters



# Health and Safety

## Performance Summary

	2012	2011	% change
Incidence of greater than three day accidents per 1,000 employees	2.07	2.99*	-31
Total number of accidents that resulted in lost time	55	74*	-26
Total accident rate per 1,000 employees	5.69	7.89*	-28
Total lost time accident incident rate per 100,000 hours worked	0.28	0.40*	-30
Total number of accident days lost per 1,000 employees	90	102	-12
Incidence of occupational illness cases per 1,000 employees	3.5	3.5	–

\* Restated.

Johnson Matthey is committed to minimising the health and safety related impacts for employees, customers, communities and other stakeholders arising from our operations and from our products in use.

Many of Johnson Matthey's products and services make a contribution to enhancing general health and wellbeing or provide safety benefits. We manufacture a range of products used in medical applications. These include opiate based active pharmaceutical ingredients (APIs) for pain relief, such as morphine and codeine, platinum based anticancer compounds for chemotherapy treatments, other controlled substance APIs, components used in medical devices which are used to assist with surgery or treat long term medical conditions and Bitrex®, the world's bitterest substance, which is added to household cleaning products to prevent accidental swallowing by children. Our emission control catalysts, which are used to reduce harmful emissions from vehicles and industrial processes, have a major impact on air quality for millions of people around the world.

Targets to improve health and safety performance are a key part of our Sustainability 2017 Vision. The group aims to achieve zero greater than three day lost time accidents and to reduce its incidence of occupational illness cases by at least 30% over five years to 2013/14. In order to meet these aspirations, long term health and safety improvement plans and performance indicators have been established.



Read more on Sustainability 2017 on pages 13 to 15 and at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

→ Read more on our progress towards Sustainability 2017 on page 17.



Read more on the health and safety benefits of our products at [www.matthey.com/sustainability/products](http://www.matthey.com/sustainability/products).

## Managing Performance and Driving Continuous Improvement

Johnson Matthey is a manufacturing business and a significant proportion of our employees work in production environments with chemicals and process machinery. Rigorous policies, systems and processes apply across all facilities to monitor and manage health and safety performance and to drive continuous improvement.

→ Read more in the Governance section on pages 80 and 81.



Read full details of our policies and strategies to manage and drive performance at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

Proactive management of health and safety delivers value for our business in many ways. It can assist in the avoidance or reduction of liability claims, potential legal exposure, concern over the cost of insurance premiums and external pressures from insurance companies. In addition, it helps support maintenance of the group's corporate reputation, expectations of its customers and in meeting government targets. Most importantly it supports our moral obligations to our employees and other stakeholders and, when effectively managed, can have a positive impact on staff morale, attendance, recruitment and retention and on our productivity, efficiency and quality of service.

## Health Performance in 2011/12

In 2011/12 we have continued to consolidate the sustainability of our corporate and facility health programmes. From May 2011, longer term health improvement goals were incorporated into

the group's ten year environment, health and safety (EHS) strategy and good progress has been made during the first full year of its implementation.

The proportion of facilities globally who reported that they had complied with the requirement to conduct an annual sustainable health review and improvement planning process rose again this year to 90%, which is the highest level achieved since this corporate requirement was introduced in 2006.

Good progress has been made against our Sustainability 2017 target to reduce the annual incidence of occupational illness cases by at least 30% over five years to 2013/14 (to 3.7 cases or less per 1,000 employees). The occupational illness incidence in 2011/12 was 3.5 employee cases per 1,000 employees (0.17 employee cases per 100,000 work hours), ahead of the group target and maintaining our performance in 2010/11. In addition, one case of chemical exposure related occupational illness occurred amongst contractors as a result of workplace exposure at a Johnson Matthey facility.

Chemical exposure related illnesses and musculoskeletal conditions accounted for 86% of reported occupational illnesses in 2011/12. Chemical exposure management and ergonomic risk management therefore continue to be the two highest priority health programmes.

During the year a working group was established to develop and implement an ergonomic risk management programme at all facilities. The group has identified and engaged a US based ergonomic consulting practice from which we will license ergonomic assessment tools, technical guidance and training materials.



- Employees discuss progress at a team meeting in our Emission Control Technologies business.

- Manufacturing active pharmaceutical ingredients at our Riverside facility in Conshohocken, USA.

### Occupational Illness Assistance Programmes

Programme recipients	Education / training	Counselling	Prevention / risk control	Treatment
Workers	Yes	Yes	Yes	Yes
Workers' families	n/a	n/a	n/a	n/a
Community members	n/a	n/a	n/a	n/a

We have also made further progress in the group's chemical exposure management programme. Through evaluating progress of its implementation we have identified areas of additional action, resources and support needed to complete the programme over an appropriate timescale. New policy and guidance on the prevention, identification and management of occupational illness and on first aid and medical emergency response have also been introduced.

During the year we have used leading health metric data from a scorecard completed by all facilities to support managers in identifying the actions needed to achieve a best practice level of health programme performance. In addition, trends in health scorecard ratings have been communicated to regional and divisional management teams to engage them in prioritising and directing health improvement activities.

The group has comprehensive programmes in place to prevent, identify and manage all types of occupational illness conditions at every facility. These include chemical related, musculoskeletal, mental health and physical agent related illnesses (noise and hand-arm vibration). The elements of these programmes are summarised in the table above (based on guidance provided in the Global Reporting Initiative reporting guidelines).

### Sustainable Health Improvement Priorities for 2012/13

We will continue to focus on reducing the incidence of occupational illness to the

lowest level reasonably achievable and to optimise the long term health, wellbeing and performance of our workforce.

The key activities in 2012/13 to address further health programme improvement through the group's ten year EHS strategy are to:

- Appoint a corporate industrial hygiene manager to provide technical advice, support and coaching on the assessment and control of workplace health hazards to all global facilities.
- Commence a programme of regional training courses to support the introduction of ergonomic risk management programme tools to each facility which will run into 2013/14.
- Introduce new corporate EHS policy and guidance on the prevention and management of platinum group metal compound health effects and noise exposure management.
- Incorporate workplace health hazard evaluation and control into the group's Manufacturing Excellence programme activities, for example, when defining best practice guidance for the design and operation of manufacturing processes.
- Continue to emphasise the management of leading health metric indicators at all facilities through the use of the health scorecard and other techniques.
- Support the specific regional health programme improvement needs of our facilities in developing countries.

- Revise and adjust the content and frequency of the health management review (audit) programme to target this more effectively according to indicators of facility health programme performance.
- Develop further sustainable health and wellness initiatives relevant to the regional and site specific health needs of the workforce.

### Safety Performance in 2011/12

Accidents and incidents are actively monitored and detailed statistics are compiled monthly at group level and used by the Chief Executive's Committee and the board at their regular meetings to review safety performance. Any accident is thoroughly investigated to determine root causes and appropriate preventative and corrective actions are assigned. The group's rate of occupational accidents involving lost time is shown in the table on page 62 and its five year performance is presented in the graphs on page 64. Details of our methodology for calculating accident statistics is described on page 172.

During 2011/12, despite increasing production levels, we have observed an improvement in safety performance and the group's greater than three day lost time accident rate per 1,000 employees at 31st March 2012 is at its lowest year end level recorded. This good result has been achieved through raising awareness of the importance of health and safety which has led to the introduction of improved accident control measures. In addition, there has been particular focus at sites with higher than average accident rates with one facility piloting a culture improvement system which will be used more widely across the group in the coming year. Our EHS Learning Events programme has continued to deliver good results, particularly at facilities submitting a higher number of EHS Learning Event reports.

## Health and Safety continued

For Johnson Matthey any accident is unacceptable and our Sustainability 2017 target is to achieve zero accidents that result in more than three days' lost time. In 2011/12, 83% of our facilities achieved zero greater than three day accidents and at a group level we completed 57 days without a greater than three day accident.

The health, safety and wellbeing of contractors who are working on our sites are of equal importance to those of our employees and the group has safety performance metrics specifically for contractors, similar to those for our employees. These temporary workers are engaged typically to cover periods of long term sickness absence or maternity leave, or to manage seasonal variations in workload. In 2011/12 there were eight lost time contractor accidents (three of which were greater than three days) compared to 12 lost time contractor accidents in 2010/11 (five of which were greater than three days). This is equivalent to an annual total lost time accident frequency rate of 0.27 accidents per 100,000 hours worked per year (2010/11 0.50 accidents per 100,000 hours worked per year).

During the year we strengthened our audit policy to include one day follow up reviews of audit recommendations to be conducted one year after the recommendations were made. A total of 19 one day reviews were undertaken this year in addition to 26 full audits across the group. Conducting these follow up reviews has significantly reduced repeat actions at subsequent audits.

The group's EHS Learning Events programme has been reinvigorated and developed into a full environment, health and safety near miss reporting system. During the year all greater than three day lost time accidents were analysed and compared with the accident types reported locally through the EHS Learning Events programme. This has allowed us to determine the effectiveness of EHS Learning Events to help reduce accidents in the workplace and has highlighted further opportunities to improve the programme going forward.

This year we have continued to develop our process risk management (PRM) programmes to develop best practice and drive improvement in process safety systems across our operations. In 2011/12 two process safety audits (one in Europe and one in North America) were conducted and these identified a series of improvement actions. We have also established a European PRM working group of engineers from our facilities in the region. The group meets twice a year to discuss PRM related issues, review industry case studies and identify further improvement opportunities.

### Safety Priorities for 2012/13

Our principal priority remains that of achieving the group's target of zero greater than three day accidents and there is an overall trend of continued improvement. Wider implementation of the EHS culture improvement programme piloted in 2011/12 is seen to be critical in speeding up improvement in our performance towards this target.

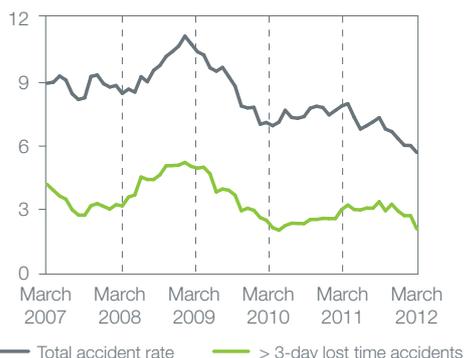
The key activities for 2012/13 to address safety improvement through the group's ten year EHS strategy are to:

- Roll out the EHS culture programme to selected businesses and develop a core set of Johnson Matthey EHS behavioural standards through consultations with the group's businesses.
- Complete the schedule of corporate EHS audits at facilities across the group, including audit action reviews and legal compliance audits.
- Review current approaches to EHS governance assurance through measurement, reporting and audit programmes to determine how these should be developed to meet future business needs.
- Continue to develop the work of the European PRM working group and establish a similar group in North America.
- Deliver fire prevention training seminars regionally, focusing on platinum group metal fires and combustible gas safety.
- Develop leading metrics for our safety, environmental, PRM and product stewardship programmes and incorporate them into our corporate EHS reporting systems.

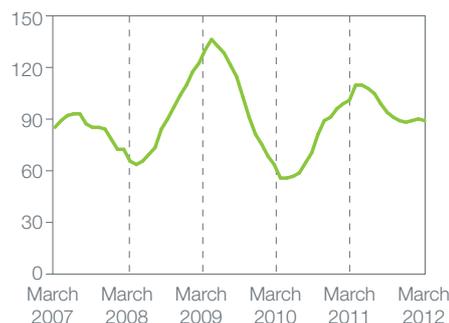
### Product Stewardship

Product stewardship involves an integrated approach to products, materials and services management designed to assess objectively and then minimise or eliminate the environmental and health related impacts of products.

**Annual Accident Rate**  
per 1,000 employees



**Annual Accident Days Lost**  
per 1,000 employees



## Case Study



### → The Right Kind of Fruit Machine!

Johnson Matthey sites around the world are concerned with the occupational health of employees, but the company's commitment to staff health and wellness goes beyond that. The Pilar site in Argentina has recently launched a wellness programme to complement an existing initiative, started by employees themselves, to improve fitness and counter the ill effects of a sedentary lifestyle.

The site was assisted by the company doctor (to advise on diet) and a personal trainer (to help with fitness). Steps were also taken to create an environment where people had access to healthy food during the working day. Dispensers offering cereals were introduced in the dining area for those taking breakfast on site and a fruit machine was installed to help all employees reach their 'five a day' portions of fruit and vegetables. Every month, the company gives each employee 20 tokens to use to obtain fruit from the machine – with the result that employees get the chance to eat fresh fruit every day at work. Uptake has been excellent and at least 90% of employees at Pilar now eat fruit on a daily basis at work.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

As part of our commitment to sustainability, we fully acknowledge that all the chemicals we use and produce must be managed responsibly. Our product stewardship systems are aligned to a key target in the Strategic Approach to International Chemicals Management (SAICM). This is to ensure sound management of chemicals throughout their complete life cycle, so that 'chemicals are produced and used in ways that minimise significant adverse impacts on human health and the environment'.

Johnson Matthey maintains a long standing commitment to product safety and conducts systematic and rigorous evaluations of both new and existing products. Our product stewardship management systems focus on the characterisation of any risks associated with product use, a thorough determination of related risk management measures and mechanisms to effectively communicate this information outside the company. We work in cooperation with industry partners and customers, regulators and non-governmental organisations to strengthen confidence in our products.

Johnson Matthey's businesses have management systems in place which assess the health and safety impacts of products during their various life cycle stages. These include coverage of:

- The product concept and research and development stage. This activity is undertaken centrally or by businesses as appropriate.
- Manufacturing and production.
- Storage, distribution and supply into markets.
- The in use service life phase.
- The end of life or reuse phase.

### Product Stewardship Performance in 2011/12

A systematic product responsibility reporting scheme (conforming to the Global Reporting Initiative Sustainability Reporting Guidelines) is used to monitor the performance of our operations and maintain surveillance of the company's products and services. In 2011/12, there were no notifications of significant end user health effects involving our products and no major incidents or environmental releases during our product distribution were recorded. No product recalls occurred for safety reasons. There were a total of three self detected incidents of non-compliance with standards or codes of practice covering product hazard communication which were resolved internally by the businesses involved.

During the year enhanced internal product stewardship systems for reviewing new and existing products were launched and are being implemented by our businesses. These new systems incorporate industry best practice guidelines and set schedules for product reviews at the pre-commercialisation stage and thereafter. They also place increased focus on supporting our supply chains, for example through conducting end use risk assessments. Updated policies and guidance covering restricted substance management and products that are subject to trade controls were issued to our businesses globally. We also published additional new health protection and environmental information for precious metal containing products for our supply chains.

Further training and technical support for our established internal product stewardship programme covering chemical exposure management were introduced this year as we work to reduce chemically related occupational illness within our workforce to the lowest level feasible.

In response to interest from our stakeholders and as part of our voluntary product responsible care efforts, Johnson Matthey has continued to fund and participate in the Pgm Health Science Research Group. Further details are provided on page 51.

### Product Stewardship Priorities for 2012/13

Johnson Matthey remains committed to driving improvement in product sustainability and effective product stewardship in the external supply chain and within our operations.

The key activities for 2012/13 to address product stewardship improvement through the group's ten year EHS strategy are to:

- Encourage the responsible management of substances throughout the supply chain.
- Enhance product sustainability as part of our overall corporate sustainability programme with a particular focus on managing restricted substances, the use of optimisation strategies during new product introduction and the application of green chemistry approaches in product design.

## Health and Safety continued

- Use systematic substance selection mechanisms to identify preferred alternatives in terms of human health and environmental safety.
- Continue to improve the publicly available information on the health and environmental effect profiles of any chemical substances placed on the market and link this to updated risk management measures.
- Promote the use of objective hazard ranking techniques and related exposure control targets for our chemical products and process intermediates. These will be applied in Johnson Matthey's workplaces and more widely in our product stewardship and risk management activities throughout the supply chain.

During 2012/13 we will also build on our capability to track and manage new regulatory initiatives, for example those in Asia, and to better respond to our supply chains and other external stakeholders on product sustainability. We will also continue to support the work of our businesses to develop a minimum standard set of EHS data for all bulk products marketed at lower production volume (i.e. approaching 1 tonne per annum).

### Animal Testing

In common with all companies developing and marketing chemical substances, Johnson Matthey must comply with international legislation to make toxicity information available to assure product safety for humans, wildlife and the environment. We are committed to ethical principles of animal protection and our corporate policy is based on the following principles:

1. Johnson Matthey has embraced the '3Rs' approach in relying on properly validated alternative methods which reduce, refine or replace the use of animal testing. Therefore we now place emphasis firstly on applying the latest integrated testing strategies (e.g. *in vitro* assays, computer modelling of effects and *in vivo* test waiving approaches). New 3R techniques are continually tracked and implemented as they become endorsed by regulatory bodies.
2. If, after confirming that suitable data does not already exist, *in vivo* studies are unavoidable, we always seek to limit new testing and avoid unnecessary studies by undertaking collaborative work with industrial partners.
3. It is ensured that any studies comply with all applicable laws, regulations, licensing and welfare codes.

4. Johnson Matthey only uses fully accredited contract research organisations and does not undertake any in house toxicity testing.
5. As a fundamental operating principle, our oversight procedures require that our businesses commission no vertebrate animal studies until a justification has been carefully considered and approved at group level.

The group does not manufacture any cosmetics or consumer goods and testing is therefore aligned to regulatory requirements for industrial substances. Any testing required as a result of registration requirements imposed under the EU REACH regulation is minimised by working within industry consortia.

Johnson Matthey shares current societal and political concern over animal testing and we only commission studies when mandated by law and if no alternatives exist. During the last year, Johnson Matthey has continued to provide financial sponsorship for external educational programmes aimed at increasing awareness of 3Rs alternative approaches. We remain optimistic that advances in toxicology science will enable us to further reduce *in vivo* testing while continuing to safeguard human health and the environment.

## Case Study



### → National Safety Day Activities at Panki

National Safety Day is an annual event in India and the Johnson Matthey site at Panki, Kanpur, celebrated the occasion with a mix of serious and light hearted activities.

In fact, the Safety 'Day' stretches into a whole week and the Panki site opted to meet on 5th and 12th March 2012. The serious side of the occasion was a seminar on personal level risk assessment and any hazards and safety challenges at the site. The seminar held an 'open mike': would-be speakers applied via departmental heads and were given five minutes to speak.

A slogan and poster competition contributed to the light hearted side of the event and entries were accepted in both Hindi and English. There was also recognition of achievements, with a number of staff who had done first aid training in the year receiving St John's Ambulance certificates. Eight EHS champions were recognised and 14 others received appreciation awards.

The National Safety activities create an enjoyable shared experience for employees, encouraging them to engage with the health and safety aims of the Sustainability 2017 Vision.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).



- Manufacturing decorative precious metals for glass and ceramics at our Maastricht facility in the Netherlands.

- Our Catalysts and Chemicals business develops and commercialises catalyst technologies for customers in the pharmaceutical and fine chemical industries.

## Responsible Care

Johnson Matthey has aligned its operating practices with the principles of Responsible Care® (as defined in the Global Charter developed by the International Council of Chemical Associations (ICCA)) and with sustainable development goals and guiding principles (for example those outlined by the UK Chemical Industries Association in its 'Chemistry of Sustainability' report).

Responsible Care® is a voluntary programme in which companies commit to continuously improve their environmental, health and safety performance. It places particular emphasis on product stewardship and sustainability, and communication with stakeholders about their products and processes.

## Regulatory Matters

### Chemical Control Regulations (REACH, GHS, TSCA and Related Standards)

Substantial progress has been made this year to develop further our testing and evaluation programmes in support of our scheduled product registrations for the next EU REACH regulation milestone in mid 2013 (covering medium tonnage substances). We continued to participate in industry consortia to maximise data sharing opportunities and to reduce costs. Preparations for compliance with new Asia region REACH equivalent regulations are also underway.

The majority of the group's products now conform with the current requirements of the Globally Harmonised System (GHS) for chemical classification and hazard communication. Following the announcement of US implementation of GHS ('HazCom 2012'), we are also working to implement the associated workplace and hazard communication requirements for this major system.

## Case Study



### → Behavioural Safety at Redwitz

A strong safety culture is key to industrial site safety. Analysis of accidents and incidents at the Johnson Matthey site at Redwitz in Germany showed that behaviour played a significant role and a behavioural safety programme was set up to improve the safety culture.

The programme was launched in the summer of 2011 and was facilitated by a specialist industrial psychologist. In the first phase, 98 employees participated as managers, supervisors and operators met to assess the site's safety performance. In the second phase of the programme, managers and supervisors developed safety behaviour standards which define the behaviour that is expected of everyone on site. These standards are being communicated to all employees and integrated into induction and staff training programmes.

All employees were involved in the programme and a collective ownership of safety has emerged. Results to date have been very promising; all lost time accidents have been reduced by more than 40% and greater than three day accidents have been reduced to zero. However, even this is not enough. In order to make further improvements, the site is continuing its behavioural safety programme and plans are in place to roll out the programme to other sites.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

Reducing the impact of our operations and developing beneficial products

# Environment

This section provides more detail on the impact of our business on the environment. It details the environmental performance of our operations in the year and highlights the beneficial impact of our products.

## Delivering Value

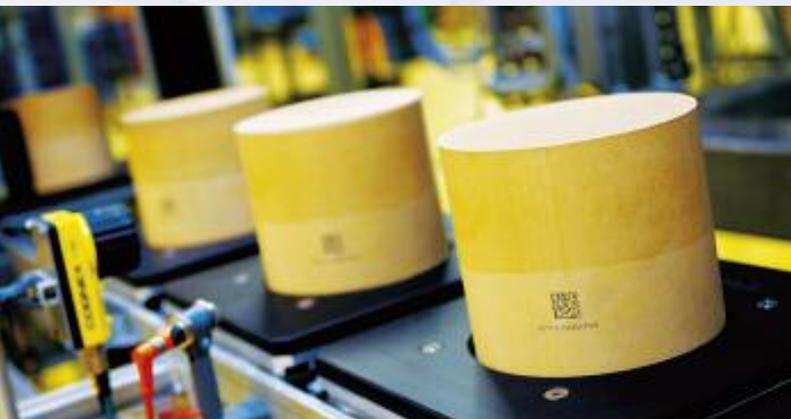


### → Developing the Next Generation of Sustainable Products

Research and development efforts at Johnson Matthey are focused on the development of new, more sustainable products for our customers. With continued interest around the world in the development of fuels from renewable resources, our scientists are applying their expertise in catalysis to develop cost competitive routes to hydrocarbon fuels derived from non-food biomass.

In one collaborative research project, which is funded by the US Department of Energy, we are investigating technology that turns carbon dioxide into liquid transportation fuels. Organisms, such as algae, are highly efficient at converting carbon dioxide into fatty acids and triglycerides and at Johnson Matthey we are developing state of the art catalysts that will convert those fatty acids and triglycerides into hydrocarbon fuels.

The project aims to develop technology that is not only cost competitive with petroleum derived fuels, but that is also more sustainable than existing biofuels. Progress to date has been showcased at the recent ARPA-e Energy Innovation summit in Washington, US where a half litre sample of biorenewable diesel, produced using Johnson Matthey's patented catalyst technology, was on display.



- Our emission control catalysts have a beneficial impact on the environment by improving air quality for millions of people around the world.

- Johnson Matthey's nitrous oxide abatement systems have contributed to reductions equivalent to over 35 million tonnes of carbon dioxide from nitric acid manufacturing plants.

## Contents

- 70 Performance Summary
- 70 Managing Performance and Driving Continuous Improvement
- 70 Environmental Performance in 2011/12
- 74 Environmental Aims and Targets
- 75 Biodiversity



# Environment

## Performance Summary

		2012	2011	% change
Energy consumption	thousands GJ	<b>4,726</b>	4,749	–
Total global warming potential	thousand tonnes CO <sub>2</sub> equivalent	<b>417</b>	415	–
Total acid gas emissions	tonnes SO <sub>2</sub> equivalent	<b>444</b>	318	+40
Total VOC emissions	tonnes	<b>189.8</b>	185.7	+2
Total waste	tonnes	<b>120,363</b>	113,671	+6
Total waste to landfill	tonnes	<b>10,708</b>	6,165	+74
Water consumption	thousands m <sup>3</sup>	<b>2,201</b>	2,076	+6

Johnson Matthey has an impact on the environment in many ways: through the resources we use, the way we operate our processes and the action of our products and services on enhancing the environment for others.

A major part of our business involves applying our scientific knowledge and expertise to turn natural resources into more valuable products for our customers. Natural resource costs are likely to increase in future as they are depleted or become harder to access. Our Sustainability 2017 and Manufacturing Excellence programmes both focus on increasing the efficiency with which we use these valuable resources and will generate cost savings for our business today and help to conserve resources for the future.

In addition, as leading recyclers and refiners of precious metals, we draw on our expertise in this area to enhance the resource efficiency of our own operations and provide improved solutions and services for our customers.

Many of the group's products have a positive impact on the environment including emission control catalysts for vehicles, process catalysts that improve resource efficiency and abatement systems which mitigate the production of greenhouse gases. A significant proportion of our R&D efforts are directed towards developing the next generation of environmentally beneficial products.

- Read more about how we use life cycle assessment tools to better understand and improve the sustainability credentials of our products on page 29.
- Read more on our product stewardship systems in the Health and Safety section on pages 64 to 66.

Targets to improve environmental performance are a key part of our Sustainability 2017 Vision. The group aims to cut its carbon intensity by half, achieve zero waste to landfill and halve the key resources per unit of output consumed by 2017. In order to meet these aspirations, long term environmental improvement plans and performance indicators have been established.



Read more on Sustainability 2017 on pages 13 to 15 and at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).



→ Read more on our progress towards Sustainability 2017 on page 17.



Read more on the environmental benefits of our products at [www.matthey.com/sustainability/products](http://www.matthey.com/sustainability/products).

## Managing Performance and Driving Continuous Improvement

The group has robust policies, systems and processes in place to manage its environmental performance and to drive continuous improvement.



→ Read more in the Governance section on pages 80 and 81.



Read full details of our policies and strategies to manage and drive performance at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

## ISO 14001

When launched in December 2007, the group's Sustainability 2017 Vision included a target to achieve ISO 14001 certification at all major manufacturing sites and by the end of 2010/11 all but one of our sites had achieved certification. This year, the final site has achieved its certification and, as detailed previously on page 15, this target has now been removed from the Sustainability 2017 Vision. We still believe that ISO 14001 is an important standard that should be maintained by our sites and achieved by new or acquired facilities within two years of beneficial operation or acquisition. As a result, this requirement has now been included in our environment, health and safety (EHS) management system.

## Environmental Performance in 2011/12

Johnson Matthey undertakes a comprehensive annual review of group environmental performance which covers all manufacturing and research and development facilities. Data is presented for a five year period for nine key environmental indicators and data is presented on a financial year (unless otherwise stated).

Business expansion has had a direct impact on our environmental performance this year with increases in eight of the nine key environmental indicators we report. The increases in our emissions and use of resources have arisen as a result of a full year's data in 2011/12 from sites acquired during 2010/11 (Process Technologies' Savannah, USA site and Fine Chemicals'



- Operations at Johnson Matthey Colour Technologies' headquarters in Maastricht, the Netherlands.

- Developing catalysts and components for fuel cells, a technology for generating low carbon power.

Riverside facility in Conshohocken, USA), recently commissioned facilities reaching full production and from incremental increases across the group's manufacturing operations as demand for our products increased. Despite these absolute increases, six out of nine of our environmental metrics increased at a rate below the rate of growth of the group's sales excluding the value of precious metals (sales) as illustrated in the graphs and tables in this section of the report. There were no significant fines and no non-monetary sanctions for non-compliance with environmental laws and regulations in the year.

### Energy Consumption

The group's total energy consumption was essentially flat this year at 4.7 million GJ but reduced by 15% relative to sales benefiting from programmes at our sites to improve energy efficiency. Of the energy consumed in 2011/12, 65% arose from direct sources (i.e. various fuels and natural gas combusted by the group) and 35% from consumed electricity generated by a supplier. The global energy bill for 2011/12 was £54.7 million, an increase of £3.0 million compared with 2010/11, reflecting higher global energy costs.

### Global Warming Potential

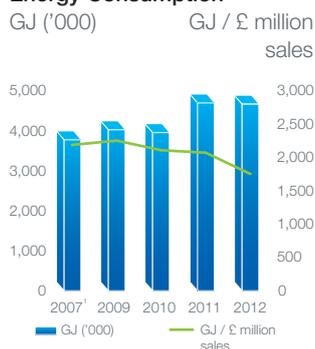
We report greenhouse gas emissions from process and energy use and convert the total group energy use to tonnes of carbon dioxide (CO<sub>2</sub>) equivalent using national and regional conversion factors for each emissions source as appropriate. The group's total global warming potential (GWP) is based on our Scope 1 and Scope 2 emissions (as defined by the greenhouse gas protocol [www.ghgprotocol.org](http://www.ghgprotocol.org)).

In 2011/12 the group's GWP increased only very slightly by less than 1% to 417,407 tonnes CO<sub>2</sub> equivalent, which represents a good result given the inclusion of a full year's data from the Savannah and Riverside sites and increased demand for our products. Of this year's total, 38% resulted from Scope 1 emissions (generated by the direct burning of fuel, predominantly natural gas) and 62% from Scope 2 emissions (generated by the purchase of grid electricity). The group also made good progress towards its Sustainability 2017 target to halve carbon intensity in 2011/12 with a year on year reduction of 14% in GWP relative to sales.

Johnson Matthey does not own the ships, trucks or aircraft used to transport its products and so emissions from transportation are not included in the data. The majority of our products are high value but low volume and so the carbon produced by transportation is low relative to other carbon intensity indicators, for example Scope 2 emissions.

We also report indicative data for our CO<sub>2</sub> emissions from travel by employees on company business and collect data from all sites. While we recognise this data does not represent all emissions as a result of company travel, it does provide an indicator and year on year comparator. In 2011/12 CO<sub>2</sub> emissions from air travel by employees on company business were 6,263 tonnes and emissions from company car travel were 1,569 tonnes. We continue to develop our work on assessing the carbon footprint of our business, including ways to expand the level of information we collect on our indirect carbon emissions, to include emissions from third party transportation of our products by air, sea, rail and road.

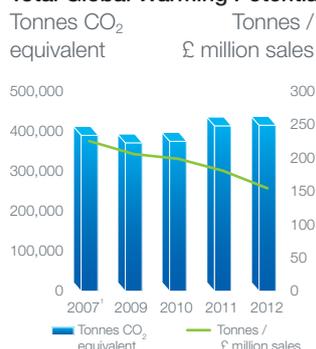
### Energy Consumption



	GJ ('000)	GJ / £ million sales
2007 <sup>1</sup>	3,787	2,200
2009	4,070	2,265
2010	4,001	2,121
2011	4,749	2,083
2012	4,726	1,764

<sup>1</sup> Calendar year.

### Total Global Warming Potential (GWP)



	Tonnes CO <sub>2</sub> equivalent ('000)	Tonnes / £ million sales
2007 <sup>1</sup>	390	226.6
2009	372	207.0
2010	377	199.9
2011	415	182.0
2012	417	155.7

<sup>1</sup> Calendar year.

## Environment continued

### The UK's Carbon Reduction Commitment

Ongoing compliance with the UK government's Carbon Reduction Commitment (CRC) does not present a material issue for Johnson Matthey, given that the majority of our UK facilities are exempt from the process as they are already being regulated under existing climate change levy agreements that drive year on year energy efficiency and reduction programmes. Our facilities in the UK account for 31% of the group's total GWP (Scope 1 and 2 emissions) and of the emissions from these facilities, over 95% are exempt from the CRC process. In the 2011/12 CRC Annual Report, to be submitted to the Environment Agency during July 2012, Johnson Matthey Plc will report energy use data for its four UK subsidiaries that are not covered by the group's exemption.

### EU Emission Trading Scheme (EU ETS)

We are closely monitoring the potential impacts and opportunities for our business arising from the Phase III of EU ETS which will be implemented in 2013.

### Other Emissions

Emissions from our operations are generated from a number of sources including combustion processes, materials handling and chemical reactions and are typically licensed by local regulations. All sites monitor emissions to ensure compliance with these regulations and set their own absolute targets aimed at reducing significant emissions as part of their local environment, health and safety improvement plans.

In 2011/12, our total emissions of acid gases have increased by 40% to 444 tonnes sulphur dioxide (SO<sub>2</sub>) equivalent and were up 19% relative to sales. This was mainly due to an increase in emissions of oxides of nitrogen (NO<sub>x</sub>) from our operations.

Compared with last year, total NO<sub>x</sub> emissions were up 44% at 566 tonnes and increased 23% relative to sales. The increase on 2010/11 was due to higher production rates at several facilities, a full year of data from Savannah and Riverside and from more robust data this year from three sites that reviewed their data collection methods for combustion generated NO<sub>x</sub> and, as a result, have reported more accurate values.

The group's total SO<sub>2</sub> emissions increased by 4.5 tonnes (or 10%) to 47.5 tonnes but fell 6% relative to sales. Our absolute emissions were impacted by a 6.2 tonne increase in SO<sub>2</sub> emissions from our Brimsdown, UK site which was partly due to increased use of its combined heat and power (CHP) generator. Emissions of volatile organic compounds (VOCs) were 4.1 tonnes (or 2%) higher at 189.8 tonnes in 2011/12 but decreased by 13% relative to sales. This increase is mainly as a result of a full year's data from Savannah and Riverside which accounted for an additional 27 tonnes of halogenated VOCs. However, overall, our emissions of halogenated VOCs reduced this year.

### Waste

The group generated 120,363 tonnes of waste during the year, an increase of 6% in absolute terms but 10% lower relative to sales. Waste to landfill increased significantly in the year, up 4,543 tonnes (or 74%) to 10,708 tonnes. Achieving zero waste to landfill by 2017 is one of the group's Sustainability 2017 targets and initiatives across our sites to reduce waste to landfill were impacted this year by the generation of waste produced from construction projects to expand operations at a number of our sites.

In terms of other waste streams, 5,251 tonnes of waste were sent for incineration (up 9%), 16,023 tonnes were sent for recovery (down 11%) and 90,677 tonnes of waste were sent for treatment and disposal by third party waste service providers (up 6%).

### Packaging Wastes

Johnson Matthey collects and quantifies the different types of packaging waste recycled by our sites as shown in the table below:

#### Waste Recycled

Packaging type	2012 Waste tonnes	2011 Waste tonnes	% change
Steel	2,314	1,847	+25
Paper	704	258	+173
Plastic	1,148	439	+162
Wood	3,003	896	+235

Good progress has been made this year with many sites recycling a greater proportion of packaging waste as a result of initiatives to increase awareness of recycling. At our Clitheroe, UK site, its packaging waste this year has included a greater proportion of plastic and wood, both of which have been recycled, thus contributing to improvement in the overall group figures for these two materials.

Johnson Matthey complies with international agreements, regulations and policies that govern the international shipment of waste. During 2011/12, 4,293 tonnes of waste (2010/11 4,295 tonnes) were moved between countries, predominately for the reclamation and reuse of metal from spent catalysts at our Brimsdown, UK refinery.

### Total Acid Gas Emissions

Tonnes SO<sub>2</sub> equivalent      Tonnes /  
£ million sales



	Tonnes SO <sub>2</sub> equivalent	Tonnes / £ million sales
2007 <sup>1</sup>	416	0.2417
2009	334	0.1859
2010	335	0.1776
2011	318	0.1395
2012	444	0.1658

<sup>1</sup> Calendar year.

### Total NO<sub>x</sub> Emissions

Tonnes      Tonnes /  
£ million sales



	Tonnes	Tonnes / £ million sales
2007 <sup>1</sup>	448	0.2603
2009	439	0.2443
2010	434	0.2301
2011	393	0.1724
2012	566	0.2113

<sup>1</sup> Calendar year.



- Our Colour Technologies business manufactures black obscuration enamels which are used in automotive glass applications.

- Manufacturing operations at our Catalysts and Chemicals business' West Deptford site in the USA.

## Case Study

### → Reducing Waste to Landfill at Clitheroe

One of Johnson Matthey's sustainability targets is to eliminate waste to landfill by 2017. On the Clitheroe site in the north of England, which makes catalysts, good progress had been made on reducing hazardous waste despatched to landfill, but the site was concerned that the level of non-hazardous waste sent to landfill would remain stagnant at around 200 tonnes.

What were the obstacles? Was an attitude of 'any bin will do' holding back efforts to reduce waste?

Of the waste sent to landfill, around 67% was non-hazardous, so this was set as a priority area. In 2011 the site met with a number of waste contractors to determine how it could move towards increased recycling and achieve a significant reduction in waste to landfill.

An ambitious target was set for 2011/12; only 100 tonnes of non-hazardous waste should be sent to landfill, just half of the 2008 figure. The new waste collection scheme has been implemented enthusiastically and the actual figure achieved came in below the target – at 78 tonnes. This is a 40% reduction on 2010/11 and led to cost savings of £7,500 for the site.



 Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

### Water Consumption

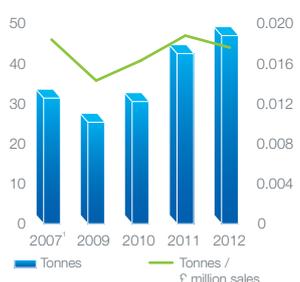
During the year, water consumption increased by 6% in absolute terms but was down 10% relative to sales compared with 2010/11. Most of this increase is from sites reporting a full year of data for the first time and from an increase in mains water

use at our Brimsdown, UK site where very dry weather reduced the scope for water harvesting. Of the total water used by the group, 91% was supplied by local municipal water authorities, 6% was drawn from boreholes and 3% was taken from local water courses. Total effluent decreased by 18% this year to 1.4 million m<sup>3</sup>, mainly

as a result of more accurate reporting from one of our sites. Of the total effluent produced, 82% was discharged to local authority sewers after treatment and in accordance with local discharge consent agreements and 18% was discharged to water courses after treatment and within quality limits set by local water authorities.

### Total SO<sub>2</sub> Emissions

Tonnes / Tonnes /  
£ million sales

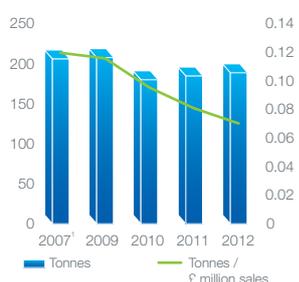


	Tonnes	Tonnes / £ million sales
2007 <sup>1</sup>	31.8	0.0185
2009	25.8	0.0144
2010	31.0	0.0164
2011	43.0	0.0189
2012	47.5	0.0177

<sup>1</sup> Calendar year.

### Total VOC Emissions

Tonnes / Tonnes /  
£ million sales



	Tonnes	Tonnes / £ million sales
2007 <sup>1</sup>	207.1	0.1203
2009	209.1	0.1164
2010	180.8	0.0959
2011	185.7	0.0814
2012	189.8	0.0709

<sup>1</sup> Calendar year.

## Environment continued

The method of water treatment used at each site is appropriate to the effluent quality and volume and the requirements of the receptor.

The chemical oxygen demand (COD) test is commonly used to indirectly measure the amount of organic compounds in water. Most applications of COD determine the amount of organic pollutants found in surface water (e.g. lakes and rivers), making COD a useful measure of water quality. In 2011/12 the group discharged organic chemicals equivalent to a COD of 260 tonnes into water courses, as regulated by local emission limits at each manufacturing facility. This is a 4% increase on the prior year which resulted mainly from the first full year of data reported by some sites.

Johnson Matthey has a robust and effective management system which requires all sites to report environmental incidents to the group's EHS department. During 2011/12 no significant spillages to the environment of raw materials, intermediates or products have been reported by the group.

### Environmental Aims and Targets

The group will continue to manage environmental impacts in the context of an expanding business by building on the best practice examples of performance improvement delivered so far, integration of lean manufacturing principles, process intensification and step change manufacturing technologies. This work will be supported by the group's global Manufacturing Excellence programme.

Our environment related priorities for 2012/13 are to:

- Ensure that the future environmental performance of the group is aligned to the Sustainability 2017 Vision of cutting carbon intensity by half, achieving zero waste to landfill and halving key resources per unit of output, by helping each business develop projects and metrics to achieve our goals.
- Further develop our internal data reporting systems to improve consistency of reporting across our sites and to increase the frequency of internal reporting.

## Case Study



### → Is Water Stress a Risk for Johnson Matthey?

Climate change experts have warned that parts of the world will experience water shortages in the decades to come. In December 2007, Johnson Matthey made a commitment to halve the amount of water it uses per unit of output by 2017. Now, in addition to its efforts to reduce water consumption, the company is assessing the water related risks in its direct business operations.

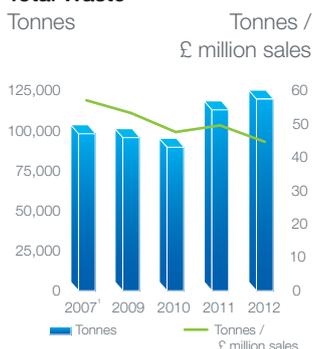
This analysis provides important insights and flags up strategic issues. If water stress deteriorated into extreme water scarcity, could manufacturing operations be affected? What are the business risks? The exercise has highlighted which manufacturing sites are in regions of water stress and has enabled informed risk analysis.

Further work will be done on water stress and risk at site and divisional level and the analysis will help Johnson Matthey to develop policies that promote water efficiency and infrastructure improvements. Process water recycling and rain water catchment systems are already part of Johnson Matthey's response to halving the use of this key resource. The water stress assessment complements existing work and provides the opportunity for high level strategic planning on water issues.

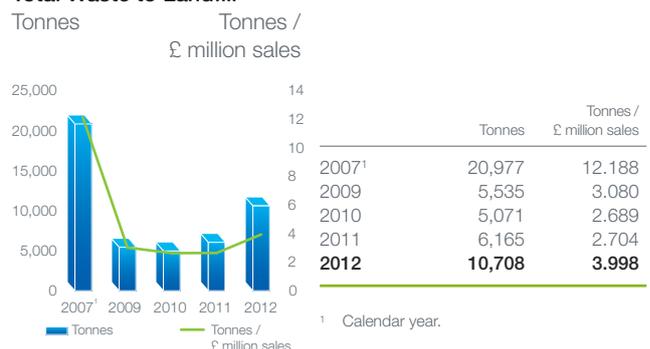


Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

### Total Waste



### Total Waste to Landfill



## Case Study

### → Green Team Promotes Business Sustainability at Manesar

A group of volunteers, known as the 'Green Team', came together at the company's Emission Control Technologies business in Manesar, India to stimulate and shape ideas for putting sustainability into practice. This was not about a single large project but a multiplicity of modest suggestions.

A whole host of energy saving, water efficiency and waste reduction projects are underway. For their personal commuting, employees are encouraged to use a car pool or public transport. Sustainability may be a serious commitment, but the Green Team believes there is no reason why it should not also be fun, and activities and communications keep employees involved.

This variety of small projects is showing big results and the business is ahead of its sustainability targets for electricity and water consumption. These efficiencies impact directly or indirectly on bringing down carbon emissions and at the same time improve profitability. Equally important, a culture of sustainability has been embedded, and this wide ranging approach is making sustainability a way of working and a way of life.



Read the full case study at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).



These priorities will be addressed by checking and focusing on them during site audits and by ongoing communication with facilities throughout the year to promote good practice and encourage the integration of sustainable technologies.

At group level, we will also continue our participation in trade association collaborations and work with general managers at our facilities to ensure compliance with upcoming changes in environmental legislation.

### Biodiversity

By the nature of our business activities, Johnson Matthey has very little negative impact on the biodiversity of terrestrial, freshwater and marine environments. We do not have any manufacturing facilities located in areas of significant ecoimportance and we have not identified any major biodiversity issues in our supply

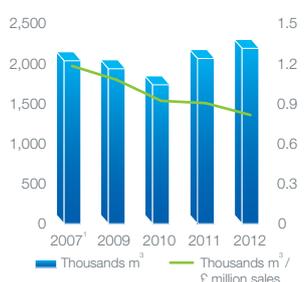
chains as we do not source large volumes of naturally derived substances. Consequently, at this stage, we do not consider biodiversity to be amongst the most material issues for our business.

As part of all significant investments and acquisitions, we complete a detailed environmental impact assessment. In addition, all our manufacturing sites that have an ISO 14001 compliant management system undertake an environmental impacts assessment that formally identifies how their operations may have an effect upon local biodiversity. Over the years, we have managed a number of projects looking at improving biodiversity at our operating sites.

During the year, we have completed a benchmarking study to assess our position on biodiversity with that of appropriate peer group companies and believe that our position is both pragmatic and consistent with other similar businesses. We continue to monitor regulation, policy, codes and standards in this area to ensure that we maintain awareness of, and respond to, any emerging issues.

### Water Consumption

Thousands m<sup>3</sup>      Thousands m<sup>3</sup> /  
£ million sales



	Thousands m <sup>3</sup>	Thousands m <sup>3</sup> / £ million sales
2007 <sup>1</sup>	2,048	1.190
2009	1,951	1.086
2010	1,750	0.928
2011	2,076	0.911
2012	2,201	0.822

<sup>1</sup> Calendar year.

Managing  
our business  
in the  
right way

# Governance

This section introduces our board of directors and details the corporate governance structures that are in place to ensure we manage our business in a responsible and transparent way.

## Delivering **Value**



### → **Supporting Our Strategy in Fine Chemicals**

People around the world are living longer. As a result, many will suffer from chronic diseases and will require more long term drug therapy. This, together with increasing demand from doctors and patients for efficient pain management and continued economic development in Asia, will further drive demand for pharmaceutical products.

Johnson Matthey holds a strong position in opiate based active pharmaceutical ingredients (APIs), which are used to relieve pain, and in other niche controlled APIs, in particular amphetamines used in the treatment of attention deficit hyperactivity disorder (ADHD). Its API Manufacturing businesses, based in the UK and USA, delivered strong growth this year, increasing their sales and growing market share.

This performance was supported by the businesses' Riverside manufacturing facility, located in Conshohocken, USA, which was acquired by Johnson Matthey in November 2010. This new plant, which more than doubles our manufacturing capacity in North America, has been successfully integrated with the businesses' other operations and is enabling us to manufacture products more efficiently, support growth and capitalise on new market opportunities.



- Clean room facilities at Riverside for the production of highly potent APIs.

- The Riverside facility more than doubles Johnson Matthey's API manufacturing capacity in North America.

## Contents

- 78 Letter from the Chairman
- 79 Governance and Sustainability
- 82 Board of Directors
- 84 Corporate Governance Report
- 100 Other Statutory Information
- 105 Nomination Committee Report
- 106 Audit Committee Report
- 108 Remuneration Report



# Governance

## Letter from the Chairman

Tim Stevenson  
Chairman



**“I am pleased to present the Governance section of the annual report, including the Corporate Governance Report for the year ended 31st March 2012.”**

### Dear Shareholder

Good governance is a cornerstone of a successful and sustainable company. The group has a well established framework of policies, processes and management systems to support its governance and sustainability efforts, which apply to all group operations worldwide. These are described on pages 79 to 81.

### The UK Corporate Governance Code

The formal Corporate Governance Report is set out on pages 84 to 99. The company is reporting against the UK Corporate Governance Code (the Code), which was introduced in June 2010. Although based on the Combined Code on Corporate Governance (the Combined Code) which it replaced, the Code contains a number of substantive changes to the Combined Code's main principles and provisions. In the main, these place greater emphasis on board behaviour. As in previous years, the company is reporting on how it has applied the main principles and whether it has complied with the relevant provisions. Under the Code, companies must explain their business model and strategies for delivering objectives. Explanations of our business model and strategy are contained in the Business Review on pages 4 to 75. The Responsibility of Directors statement is set out on page 120.

### Board Role and Effectiveness

The preface to the Code encourages chairmen to report in their annual statement how they have ensured that the Code principles concerning leadership and board effectiveness have been applied during the year. I refer to this briefly in my Chairman's Statement on pages 6 and 7 and more fully in the Corporate Governance Report. In preparing these, account has been taken of the Guidance on Board Effectiveness issued by the Financial Reporting Council in March 2011, which is aimed at assisting boards in applying these Code principles.

### Board and Committee Evaluation

We report on pages 96 and 97 on the board and committee evaluation process carried out following my appointment as Chairman Designate in March 2011. For the first time, the evaluation was externally facilitated by an independent consultant experienced in board evaluation. The evaluation process was ongoing at the date of publication of the 2011 annual report and has since been concluded. We report on the methodology used and the outcome. The board is conducting an internal review process this year and we describe the process being used. I propose to present the outcome of the evaluation, which is not complete at the date of publication of this annual report, to the meeting of the board in July 2012. I will report fully in the 2013 annual report.

### Boardroom Diversity and Succession Planning

Boardroom diversity and succession planning are key issues for all boards. Descriptions of our approaches to these topics are set out on pages 92 and 93.

### UK Corporate Governance Code Compliance Statement

Our statement of compliance with the provisions of the Code is set out on page 85. I am pleased to report that except in one limited respect, the company has complied with all relevant provisions of the Code throughout the year ended 31st March 2012 and from that date up to the date of publication of this annual report.

Tim Stevenson  
Chairman

## Governance and Sustainability Introduction

The group has well established policies, processes and management systems to support its governance and sustainability efforts, which apply to all group operations worldwide. These encompass the key areas of:

- Business integrity and ethics
- Supply chain management
- Environment, health and safety (EHS)
- Human resources.

Together they provide the framework for managing environmental, social and governance matters. Brief summaries are set out in this section. Further details, together with information about progress and developments over the year to 31st March 2012, can be found on the company's website.



Read more at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

Compliance with applicable legal requirements is a minimum standard for group operations and employees. In many cases we set standards which are in advance of these.

Employment contracts, handbooks and policies specify acceptable business practices and the group's position on ethical issues. The Group Control Manual, which is distributed to all group operations, and security manuals provide further operational guidelines to reinforce these.

The Corporate Governance Report on pages 84 to 99 describes the role of the board, the Audit Committee and other committees in risk management and internal control.

The board of directors is ultimately responsible for social, environmental and ethical matters. These matters are embedded into the group's risk management processes and reviewed annually by the board. The Audit Committee monitors performance and reviews the business risks associated with corporate social responsibility (CSR) at least once a year. Policies are set and approved by the Chief Executive's Committee (CEC).

The CEC also addresses risk and control issues and reviews key EHS, social and governance issues. The CSR Compliance Committee, a sub-committee of the CEC, has specific executive responsibility for the identification and monitoring of risks in these areas. It sets and oversees compliance with group standards through the dissemination, adoption and implementation of appropriate group policies and other operational measures.

Every business is required to include sustainability in its annual budget setting process and define the nature of programmes and projects to be undertaken together with capital expenditure requirements and value generated over a three year business cycle. Plans are discussed with the CEC and are formally approved by the board. As part of the process, progress against the Sustainability 2017 targets is assessed on a group basis to establish if additional management action is required.

We have a formal system of site and functional reviews to drive improved performance in sustainability. In 2011/12, 12 site reviews and six sustainability training sessions were undertaken.

The group's sustainability strategy (as detailed in the section on Our Strategy on pages 13 and 14) was defined following an assessment of the risks, major impacts and future commercial opportunities open to the business. The long term targets

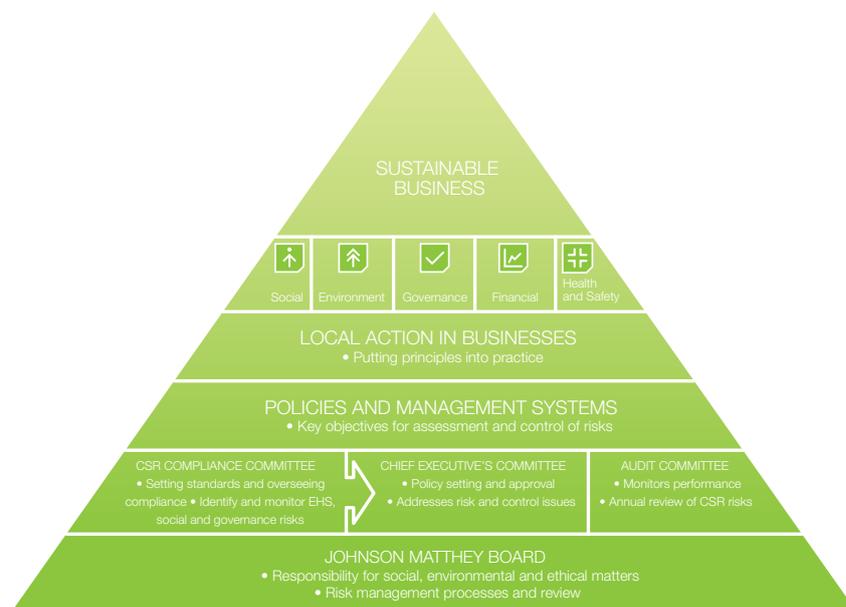
within it address the issues which could potentially have a material effect on the group's future performance. The group's materiality map outlines the key material issues and the targets in place to address and monitor them.



View the materiality map online at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

The area of sustainability continues to develop rapidly and we continually monitor emerging issues, regulation, legislation, standards and good practice. Developments are proactively managed through reviewing the external landscape to understand the material issues that may negatively impact the group or present real business opportunities. Responsibility for identifying and assessing these issues lies with the group sustainability team and the CSR Compliance Committee.

During the year a gap analysis and peer review study against the ISO 26000 guidelines on social responsibility were conducted to ensure the group remains abreast of best practice developments in sustainability. We continued to develop our understanding of life cycle assessment (LCA) and completed the first full quantitative LCA of our automotive emission control catalysts (see page 29). In addition, a project to understand potential implications of water stress to our operations was carried out as described on page 74.



## Governance continued

### Business Integrity and Ethics

Johnson Matthey strives to maintain the highest standards of ethical conduct and corporate responsibility worldwide to ensure we act with integrity, transparency and care for the rights of the individual wherever we do business. The group's ethical principles and standards are set out in its Business Integrity and Ethics Policy which applies to all the group's employees.



View the policy online at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

The board and its committees, the Chairman, the Chief Executive and the other individual directors all play key roles, together with management, in the promotion and monitoring of ethical behaviour and the safeguarding of the group's reputation.

Compliance training is provided to employees to support their understanding of, and commitment to, group policies in order to protect and enhance the company's reputation. The training educates managers in their responsibilities for employees, commercial contracts and company assets and is delivered globally via online learning programmes, face to face seminars and individual training. Online compliance training for employees addresses the bribery and corruption, money laundering and competition risks faced by the group.

All facilities have established policies and procedures for employees to raise employment related issues for consideration and resolution.

A confidential, secure, externally-run 'whistleblowing' website and telephone helpline are also in place to give all employees additional means to raise any issue of concern. The website offers multilingual access and allows for written or telephone reports. The site is publicised via site notice boards and the company's corporate intranet site. Reports received through the website and helpline (as well as any received through other media, such as email, telephone or letter) are appropriately investigated in accordance with the Group Human Resources Policy on Whistleblowing. Responses and outcomes are posted on the website, or are communicated to employees via other internal media, such as site notices or briefings. For the group as a whole, there was a total of eight new whistleblowing reports in the calendar year 2011 and all but two have been resolved as at the date of publication of this annual report.

### Supply Chain Management

Management of supply chain and contractor activities is a core component of the ISO 9000 and ISO 14000 series of standards. Supply chain and contractor management questionnaires are a requirement for achieving and maintaining registration and, as such, ISO registered Johnson Matthey operations require the completion of appropriate questionnaires. For those operations without ISO registration, the group EHS management system provides policy and guidance on supply chain management and contractor control.

The group's Ethical and Sustainable Procurement Policy provides clear guidance on various topics including those relating to the selection of suppliers, auditing against standards and ethical conduct with suppliers.



View the policy online at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

Johnson Matthey is confident of the human rights performance of its own operations but recognises that business practices in the supply chain are not always transparent and represent a risk that must be managed. Every effort is made to ensure the issues are managed effectively. We support the principles defined within the United Nations Universal Declaration of Human Rights and the International Labour Organisation Core Conventions including the conventions in relation to child labour, forced labour, non-discrimination, freedom of association and collective bargaining. Compliance with and respect for these core principles are integrated within the risk assessment procedures and impact assessments which are undertaken when entering into business in a new territory and within the due diligence processes when making an acquisition or entering a joint venture.

Johnson Matthey's North American businesses have developed a Conflict Free Minerals Policy in response to US legislative moves to address reports on the role of conflict minerals in financing human rights violations in the Democratic Republic of the Congo. The policy was published in March 2011. In January 2012, these businesses also issued a Slavery and Human Trafficking Policy in response to the California Transparency in Supply Chains Act 2010. Both policies are available on the company's website.



View the policies online at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

### Environment, Health and Safety

Johnson Matthey is committed to providing the highest level of protection to the environment and to safeguarding the health, safety and wellbeing of its employees, customers, communities and other stakeholders. This is supported by policies, a comprehensive management system, governance, careful risk assessment, auditing and training which promote continuous improvement and ensure that high standards are achieved at sites worldwide. In addition, all facilities have developed local policies to meet international, national, local and corporate requirements.

The Environment, Health and Safety Policy is a written statement, formulated and agreed by the CEC. Signed by the Chief Executive, it is available at all sites and forms the basis of the group EHS management system.



View the policy online at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

The group EHS management system is available to all employees via the group intranet. It is regularly reviewed and, together with the corporate policies and objectives, it defines accountability and sets the standards against which conformance audits are assessed.

EHS compliance audits are conducted to maintain continuous improvement and all Johnson Matthey operated manufacturing and research and development facilities are included in the audit programme. Audit frequency for each facility is determined by the scale, inherent risk and past performance of the operation. Audits are carried out by experienced ISO qualified EHS professionals and controlled by the Group EHS Assurance Director. Health management reviews are undertaken every three to four years at all operational sites. They are conducted by the Director of Group Health who provides consulting advice to support the prioritisation and planning of programmes to optimise workplace health and promote workforce sustainability. In addition, all businesses undertake annual health management improvement planning to adjust health programmes to meet changing business needs.

At each board meeting, the board reviews group EHS performance reports for the prior months. These reports set out the group's EHS performance in terms of accident and incidence rates, lost work days and the rolling all lost time accident rate. The reports also contain information



- Development of new products for automotive glass applications at our Colour Technologies business' technology centre in Maastricht, the Netherlands.

- Sustainability initiatives at Johnson Matthey's sites around the world are focused on improving resource efficiency and developing more sustainable products.

from the businesses across the group on lost time accidents, as well as details of any contractor incidents, occupational illness, sickness absence and any regulatory action. The board reviews EHS strategy and reviews the EHS assurance process on an annual basis.

All EHS audit reports, including health management reviews, are reviewed by the CSR Compliance Committee and appropriate follow up actions are taken on outstanding issues. During 2011/12 a total of 26 detailed compliance audits and 19 one day audit action reviews were completed. Health management reviews were conducted at 16 facilities.

A variety of training programmes are in place to support continuous improvement in EHS performance and regular meetings are held in Europe, North America and Asia to enable the group's EHS professionals to network, share best practice and discuss the impact of future EHS legislation.

## Human Resources

The group's human resources standards are progressive, consistent and aimed at bringing out the best in our people.

Group policies are supported by detailed regional and individual business procedures which are regularly updated to reflect both regional best practice and local legislation. Site specific human resources policies and procedures are communicated to staff at inductions and through staff handbooks. Human resources policies and risks are examined by the CEC and the CSR Compliance Committee.

The group's policies on equal opportunities and training are published on the company's website and are also detailed below.



View the policies online at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

In line with our Equal Opportunities Policy, we recruit, train and develop employees who meet the requirements of the job role regardless of gender, ethnic origin, age, religion, sexual orientation or disability. The policy recognises that people with disabilities can often be denied a fair chance at work because of misconceptions about their capabilities and seeks to enhance the opportunities available by attempting, wherever possible, to overcome obstacles, such as the need to modify equipment, restructure jobs or to improve access to premises, provided such action does not compromise health and safety standards.

Similarly, employees who become disabled during their employment will be offered employment opportunities consistent with their capabilities. We value the diversity of our people as a core component of a sustainable business and employment applications are welcomed and encouraged from all sections of the community including minority groups.

The Management Development and Remuneration Committee takes a special interest in ensuring compliance with the Training and Development Policy objectives in order to:

- Ensure highest standards in the recruitment of employees
- Assess training needs in the light of job requirements
- Ensure relevance of training and link with business goals
- Employ and evaluate effective and efficient training methods
- Promote from within, from high potential pools of talent
- Understand employees' aspirations
- Provide development opportunities to meet employees' potential and aspirations.



View the policy online at [www.matthey.com/sustainability](http://www.matthey.com/sustainability).

Following the development last year of a ten year human resources strategy to support business growth over the next decade, the focus now is on significant recruitment in our operations in Asia as our businesses in the region continue to expand.

# Board of Directors



**1. Tim Stevenson OBE**

Chairman, age 64; joined Johnson Matthey as Chairman Designate in March 2011; appointed Chairman in July 2011. Has been Chairman of The Morgan Crucible Company plc since December 2006 and was Chairman of Travis Perkins plc from November 2001 to May 2010. From 1975 to 2000 he held a variety of senior management positions at Burmah Castrol plc, including Chief Executive from 1998 to 2000. He is a qualified barrister and is Lord Lieutenant of Oxfordshire. M, N

**2. Neil Carson BSc**

Chief Executive, age 55; joined Johnson Matthey in 1980; appointed Division Director, Catalytic Systems in 1997 after having held senior management positions in the Precious Metals Division as well as Catalytic Systems in both the UK and the US. Appointed to the board as Managing Director, Catalysts & Chemicals in August 1999 and additionally assumed board level responsibility for Precious Metals Division in August 2002. Appointed Chief Executive in July 2004. Currently a non-executive director of AMEC plc.

**3. Robert MacLeod**

Group Finance Director, age 48; joined Johnson Matthey as Group Finance Director Designate in June 2009 and assumed his current role in September 2009. Previously he was Group Finance Director of WS Atkins plc and worked in a variety of senior financial roles at Enterprise Oil plc. He is currently a non-executive director of Aggreko plc. He is a Chartered Accountant.

**4. Michael Roney**

Senior Independent Director and Chairman of the Management Development and Remuneration Committee, age 57; appointed a non-executive director in June 2007. Currently Chief Executive of Bunzl plc. Joined Bunzl plc as a non-executive director in 2003. Prior to becoming Chief Executive of Bunzl he was the Chief Executive Officer of Goodyear Dunlop Tires Europe BV and had an extensive career with the Goodyear Tire and Rubber Co holding a number of senior management positions with responsibilities in Latin America, Asia, Eastern Europe, the Middle East and Africa. A, M, N

**5. Alan Ferguson**

Chairman of the Audit Committee, age 54; appointed a non-executive director in January 2011. Currently a non-executive director of Croda International Plc and The Weir Group PLC (where he is chairman of their respective audit committees). He was previously Chief Financial Officer and a Director of Lonmin Plc. He left Lonmin in December 2010. Prior to joining Lonmin, he was Group Finance Director of The BOC Group until late 2006 when the Linde Group acquired BOC. Before joining BOC in 2005, he worked for Inchcape plc for 22 years in a variety of roles including Group Finance Director from 1999 until his departure. He is a Chartered Accountant. A, M, N

**6. Sir Thomas Harris KBE CMG**

Age 67; appointed a non-executive director in April 2009. Currently Vice Chairman of Standard Chartered Bank, a non-executive director of SC First Bank (Korea), City UK and the UK India Business Council. Until 2004, he was Director General of Trade & Investment USA responsible for British business and technology promotion throughout the United States. He served previously as British Ambassador to the Republic of Korea in Seoul, Deputy High Commissioner in Lagos, Nigeria and Commercial Counsellor in the British Embassy in Washington DC. A, M, N

**7. Dorothy Thompson**

Age 51; appointed a non-executive director in September 2007. Currently Chief Executive of Drax Group plc. Joined the board of Drax Group plc as Chief Executive in 2005. Prior to joining Drax she was head of the European business of the global power generation firm, InterGen. First starting her career in banking she has had senior management roles in the UK, Asia and Africa. A, M, N

**8. Larry Pentz BS ChE, MBA**

Executive Director, Environmental Technologies, age 57; joined Johnson Matthey in 1984; appointed Division Director, Process Catalysts and Technologies in 2001 after having held a series of senior management positions within Catalysts Division in the US. Appointed Executive Director, Process Catalysts and Technologies in August 2003, Executive Director, Emission Control Technologies in July 2004 and to his current position in April 2009. Currently a non-executive director of Victrex plc.

**9. Bill Sandford BA**

Executive Director, Precious Metal Products, age 59; joined Johnson Matthey in 1977; appointed Division Director, Precious Metal Products in 2001 after holding a series of senior management positions within the division. Appointed Executive Director, Precious Metal Products in July 2009.

**Committees of the Board**

- A Audit Committee
- M Management Development and Remuneration Committee
- N Nomination Committee



**Simon Farrant**

Company Secretary; joined Johnson Matthey from corporate legal practice in 1994. Appointed Company Secretary in 1999 and Group Legal Director in 2007. He is a Solicitor and Attorney & Counselor-at-Law (State of New York).

# Corporate Governance Report

## → Contents

85	The UK Corporate Governance Code	97	<b>Accountability</b>
85	Statement of Compliance with the Provisions of the Code	97	The Audit Committee
		97	Financial and Business Reporting
		97	Risk Management and Internal Control
85	<b>Leadership</b>	98	<b>Remuneration</b>
85	The Role of the Board		
86	The Roles of the Chairman and the Chief Executive and Division of Responsibilities		
86	The Role of the Executive Directors		
86	The Role of the Non-Executive Directors		
87	The Role of the Senior Independent Director		
87	The Role of the Company Secretary		
87	Board Meetings		
88	Board Committees		
88	Board Committee Membership		
89	Board Committee Terms of Reference		
91	Board and Committee Attendance		
91	The Chief Executive's Committee		
91	<b>Effectiveness</b>		
91	The Composition of the Board		
92	Appointments to the Board and its Committees		
92	Succession Planning		
92	Boardroom Diversity		
93	Board Balance – Independence of the Non-Executive Directors and of the Chairman		
94	Time Commitment of the Chairman and of the Non-Executive Directors		
94	Terms of Appointment of the Non-Executive Directors		
94	Annual Re-Election of Directors		
94	Information and Support		
94	Independent Professional Advice		
94	Director Induction, Familiarisation, Training and Development		
95	Indemnification of Directors and Insurance		
95	Directors' Conflicts of Interest		
96	Evaluation of the Board, Board Committees and Directors		
97	Review of the Chairman's Performance		

This section of the annual report discusses the company's corporate governance structures and processes.

## The UK Corporate Governance Code

The UK Corporate Governance Code (the Code), issued by the Financial Reporting Council (FRC) in June 2010, contains broad principles together with more specific provisions which set out standards of good practice in relation to board leadership and effectiveness, remuneration, accountability and relations with shareholders. Listed companies, such as Johnson Matthey, are required to report on how they have applied the main principles of good governance set out in the Code and either to confirm that they have complied with the Code's provisions or to provide an explanation where they have not. The Code replaced the previous Combined Code on Corporate Governance and applied to the company throughout the year ended 31st March 2012.

In his statement on pages 6 and 7, the Chairman comments on how the Code principles relating to the role and effectiveness of the board (in Sections A (Leadership) and B (Effectiveness) of the Code) have been applied throughout the year ended 31st March 2012.

This Corporate Governance Report, together with the Nomination Committee Report on page 105, the Audit Committee Report on pages 106 and 107 and the Remuneration Report on pages 108 to 117, describes how the company has complied with the provisions of the Code and applied the main principles set out in the Code during the year ended 31st March 2012.

## Statement of Compliance with the Provisions of the Code

Except as referred to below, the company has complied with all relevant provisions of the Code throughout the year ended 31st March 2012 and from that date up to the date of publication of this annual report.

The company has not complied with part of Code provision E.1.1, which provides that *"the senior independent director should attend sufficient meetings with a range of major shareholders to listen to their views in order to help develop a balanced understanding of the issues and concerns of major shareholders"*. The board considers that there are appropriate mechanisms for the views of shareholders to be listened to and communicated to the board as a whole, without it being necessary for the Senior Independent Director to attend meetings with major shareholders. The Senior Independent Director is, however, available to attend such meetings if requested by shareholders. The board believes that its practices in this respect are both consistent with the relevant main principle of the Code concerning dialogue with shareholders, to which the Code provision relates, and consistent with good governance. More information on relations with shareholders is set out on pages 98 and 99.

## Leadership

### The Role of the Board

The names and biographical details of all the members of the board including details of their relevant experience and other significant commitments are set out on page 83.

The board's role is to provide leadership of the company and direction for management. It is collectively responsible and accountable to the company's shareholders for the long term success of the group and for ensuring the appropriate management and responsible operation of the group in pursuit of its objectives. The board reviews management performance and the operating and financial performance of the group as a whole. The board is responsible for ensuring that the necessary resources are provided for the company to meet those objectives.

The board sets, and is collectively responsible to the company's shareholders for the achievement of, the group's strategic objectives and it determines the nature and extent of the significant risks it is willing to take in order to achieve those objectives. Strategy is discussed in detail on pages 12 to 15. The process for the consideration of risk is discussed on pages 20 to 21.

The board approves the group's governance structures and reviews the group's internal control and risk management framework to ensure that they are prudent and effective and that risk is able to be assessed, monitored and managed. The board is collectively responsible to the company's shareholders for the group's system of corporate governance and is ultimately accountable for the group's activities, strategy, risk management and financial performance, for stewardship of the group's resources and for social, environmental and ethical matters.

Key matters for board decision include approval of the annual group operating and capital expenditure budgets and annual group three year plan, as well as the group strategy. The board also approves announcements of the group's results, the Annual Report and Accounts, the declaration of the interim dividend and recommendation of the final dividend. The board is responsible for considering and approving major capital projects, major acquisitions and major disposals of assets or operations in excess of defined thresholds.

In discharging its responsibilities the board seeks to set, promote and demonstrate adherence to clear values and ethical standards for the group. The board also remains cognisant of the need to observe the duties owed by directors in law, including the overriding duty for each director to act in the way he or she considers, in good faith, will be most likely to promote the success of the company for the benefit of its members as a whole, whilst balancing the interests of stakeholders (the company's shareholders, the group's employees, suppliers and customers and the broader community).

The board determines the structure, size and composition of the board, appointments to the board, selection of the Chairman and the Chief Executive, appointment of the Senior Independent Director and membership and chairmanship of board committees. The board has overall responsibility for succession planning for the Chief Executive and the other executive and non-executive directors and is involved in succession planning for senior management. Further information on the succession planning process is set out on page 92.

Certain types of decision are taken by the board and others are delegated by the board to executive management. A formal schedule of matters specifically reserved for board decision has been adopted by the board. This is set out in full in the Investor Relations / Corporate Governance section of the company's website.

# Corporate Governance Report continued

The board discharges its responsibilities through an annual programme of board and other meetings. Through a planned programme of board agendas, referred to further under 'The Role of the Chairman' below, the board ensures that all necessary matters are discussed. The board is afforded sufficient time for debate and challenge, particularly in respect of strategy and risk, including risk appetite. The board also seeks to allow sufficient opportunity for the review of past decisions where necessary. At board meetings, the board receives and considers papers and presentations from management in respect of matters under review. Effective review and decision making is supported by provision to the board of high quality, accurate, clear and timely information and the obtaining by the board of expert and independent opinion, analysis and advice where necessary (see 'Information and Support' on page 94). The board's processes in respect of conflicts of interest are dealt with under 'Directors' Conflicts of Interest' on pages 95 and 96. The board delegates certain specific responsibilities to board committees, as described under 'Board Committees' on page 88.

## The Roles of the Chairman and the Chief Executive and Division of Responsibilities

Tim Stevenson was appointed Chairman with effect from the close of the 2011 Annual General Meeting on 19th July 2011, having been appointed to the board on 29th March 2011. Mr Stevenson's biographical details including details of his relevant experience and other significant commitments are set out on page 83.

Neil Carson was appointed Chief Executive in July 2004. Mr Carson's biographical details including details of his relevant experience and other significant commitments are set out on page 83.

There is a clear division of responsibilities between the running of the board and the executive responsibility for the running of the company's business. No one individual has unfettered powers of decision. The roles of Chairman and Chief Executive are separate and the division of responsibilities between these roles is clearly established in a written statement adopted by the board on 28th April 2005. This is set out in full in the Investor Relations / Corporate Governance section of the company's website.

## The Role of the Chairman

The Chairman leads the board. He is responsible for creating the conditions for, and for ensuring, an effective board and effective contributions from individual directors, particularly non-executive directors, based on a culture of mutual respect, openness, debate and constructive challenge. To achieve this it is necessary for the Chairman to facilitate and encourage open communication and constructive working relations between the executive and non-executive directors. The Chairman seeks to ensure that the executive directors are open and responsive to constructive challenge by the non-executive directors of executive proposals. The Chairman is in frequent contact with the Chief Executive, meeting face to face or by telephone at least once each week. The Chairman also keeps the non-executive directors up to date with significant developments between board meetings. The Chairman is also responsible for ensuring effective communication with shareholders and this is discussed further under 'Relations with Shareholders' on pages 98 and 99.

The Chairman sets the board's agenda and ensures that adequate time is dedicated for discussion of all agenda items, particularly strategic issues and risk appetite. Since his appointment as Chairman in July 2011, Mr Stevenson has led a detailed process of board agenda review and planning, working with the Company Secretary, the chairmen of the board committees and the Chief Executive. During the year, the board approved an annual agenda plan designed to ensure that all necessary matters are reserved for board decision and are afforded adequate time for discussion throughout the year. Particular attention has been paid to ensuring that sufficient time is made available for the discussion of strategy in order to allow the opportunity for the non-executive directors to challenge and help develop strategy proposals. Strategy is discussed in detail on pages 12 to 15. The Chairman monitors, with assistance from the Company Secretary, the information distributed to the board to ensure that it is of high quality, accurate, clear and timely.

During the year ended 31st March 2012, the Chairman met with the non-executive directors without the executives being present in order to review executive director performance.

## The Role of the Chief Executive

The Chief Executive has day to day management responsibility for the running of the group's operations, for the application of group policies and for the implementation of group strategy and policies agreed by the board. The board has given the Chief Executive broad authority to operate the business of the group and he is accountable for, and reports to the board on, the performance of the business. The Chief Executive also has a key role in the process for the setting and review of strategy. More broadly, the Chief Executive promotes the company's culture and standards, including appropriate governance standards, throughout the group. In addition, he ensures that the views of the executive directors on business issues and, as appropriate, employees' views on relevant issues are communicated to the board in a balanced way.

In carrying out his responsibilities, the Chief Executive is supported by the Group Finance Director who, together with the Chief Executive, is responsible amongst other things for ensuring that high quality information is provided to the board on the company's financial performance.

## The Role of the Executive Directors

The biographical details of the executive directors and details of their relevant experience and other significant commitments are set out on page 83.

The executive directors have specific executive responsibilities but as directors their duties extend to the whole of the group's operations and activities and are not confined to the parts of the business encompassed by their specific executive roles.

## The Role of the Non-Executive Directors

The biographical details of the non-executive directors including details of their relevant experience and other significant commitments are set out on page 83.

The role of the non-executive directors is to scrutinise the performance of management in meeting agreed goals and objectives and to monitor the reporting of performance. Their role is also to satisfy themselves on the integrity of financial information and that financial and non-financial controls and systems of risk management are robust and defensible.

As members of the board, the non-executive directors have a key role in constructively challenging in all areas and this is vital to the independence and objectivity of the board's deliberations and decision making. This is particularly important in helping develop proposals on strategy. The Chief Executive and the other executive directors are open and responsive to constructive challenge by the non-executive directors of executive proposals. Non-executive directors also have an important part to play in supporting the Chairman and the executive directors in instilling the company's culture, values and standards within the board and more broadly within the group.

As chairmen of the board committees (Michael Roney of the Management Development and Remuneration Committee and Alan Ferguson of the Audit Committee), the non-executive directors fulfill important leadership roles. The non-executive directors are also responsible for determining appropriate levels of remuneration for the executive directors and have a prime role in appointing and, where necessary, removing executive directors, and in succession planning. Further information on succession planning is set out on page 92.

### **The Role of the Senior Independent Director**

Michael Roney was appointed by the board as the Senior Independent Director with effect from the close of the 2011 Annual General Meeting on 19th July 2011.

The role of a Senior Independent Director is to provide a sounding board for the Chairman, to serve as a focal point and intermediary for the concerns of the other non-executive directors when necessary and to ensure that any key issues not being addressed by the Chairman or the executive management are taken up. While no such circumstances have arisen in respect of the company, the board and the Senior Independent Director recognise that the Senior Independent Director may, if circumstances dictate, be required to work with the Chairman or others or to intervene to resolve any significant issues arising which threaten the stability of the company or the board.

The Senior Independent Director is available to shareholders should they have concerns which contact through the normal channels of Chairman, Chief Executive or other executive directors has failed to resolve or for which such contact may be inappropriate. He is available to attend meetings with major shareholders to listen to their views in order to help develop a balanced understanding of their issues and concerns.

The Senior Independent Director plays an important role in respect of succession to the group chairmanship by ensuring there is an orderly succession process. Alan Thomson, the then Senior Independent Director, led the work of the Nomination Committee in selecting and appointing a successor to Sir John Banham as Chairman of the board.

The Senior Independent Director is responsible for leading the annual appraisal of the Chairman's performance and this is discussed further under 'Review of the Chairman's Performance' on page 97.

### **The Role of the Company Secretary**

Simon Farrant was appointed Company Secretary on 1st May 1999. He is secretary to the board and all of its committees. Mr Farrant's biographical details are set out on page 83.

The Company Secretary reports to the Chairman on board governance matters. Together with the Chairman he keeps the efficacy of the company's and the board's governance processes under review and considers improvements. He is also responsible to the board in respect of compliance with board procedures. He is responsible, through the Chairman, for advising and keeping the board up to date on all legislative, regulatory and governance matters and developments. Under the direction of the Chairman, the Company Secretary's responsibilities include ensuring good information flows within the board and its committees and between senior management and non-executive directors, as well as facilitating induction and assisting with professional development as required. The advice, services and support of the Company Secretary are available to all individual directors.

### **Board Meetings**

The board meets regularly throughout the year in order to effectively discharge its duties.

During the year ended 31st March 2012 the board met seven times. The board met once between 31st March 2012 and the date of publication of this annual report.

At its meeting on 29th September 2011, the board reviewed and approved the board agenda plan for 2012/13 and for subsequent years. The board agreed that the business usually conducted at the meeting held in early May each year could be conducted at other meetings during the year and that such a meeting was not, therefore, required or necessary. Accordingly, the board has agreed to reduce the number of meetings it holds each year to six by eliminating its meeting in early May. The board will keep the efficacy of this change under review.

During the year ended 31st March 2012, the board met outside the UK on one occasion, in September 2011, in Philadelphia, USA when it visited Fine Chemicals' active pharmaceutical ingredients (API) manufacturing facility at Riverside, Conshohocken, Pennsylvania.

# Corporate Governance Report continued

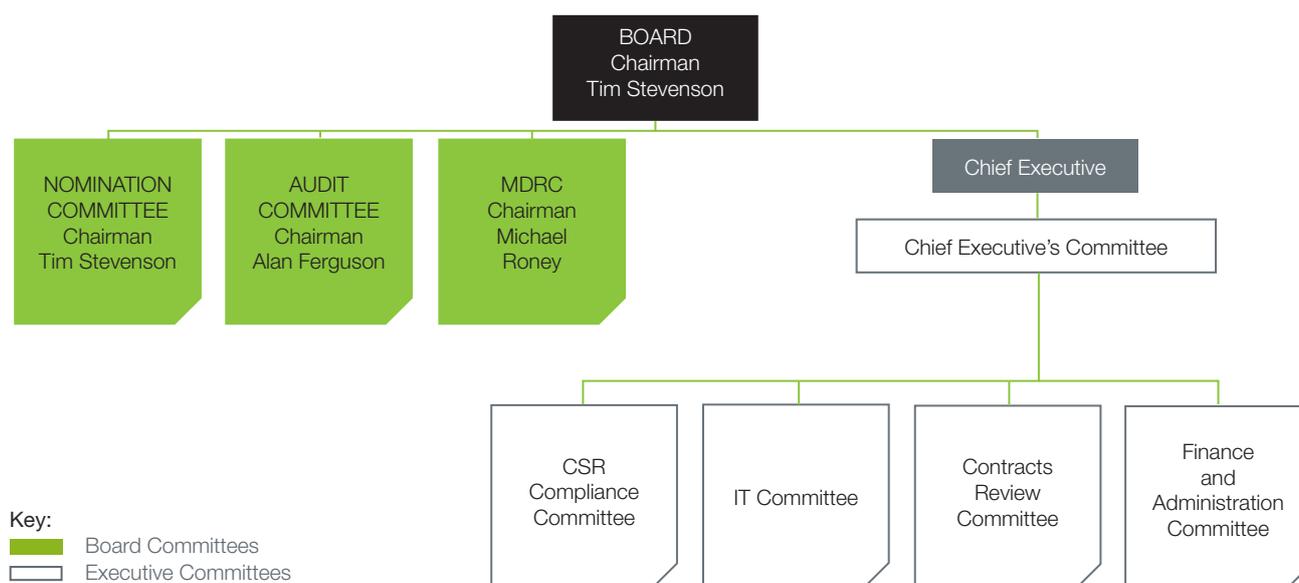
## Board Committees

The board has established the following committees:

- The Nomination Committee
- The Audit Committee
- The Management Development and Remuneration Committee (MDRC).

The Nomination Committee Report is on page 105, the Audit Committee Report is on pages 106 and 107 and the Remuneration Report, which describes the work of the MDRC, is on pages 108 to 117.

The reporting framework of the board committees and of the Chief Executive's Committee and its sub-committees is shown below.



The board ensures that its committees are provided with sufficient resources to undertake their duties, including access to the services of the Company Secretary as required. Each board committee has the authority to seek any information that it requires from any officer or employee of the company or its subsidiaries. In connection

with its duties, each committee is authorised by the board to take such independent advice (including legal or other professional advice), at the company's expense, as it considers necessary. Each committee may request information from, or commission investigations by, external advisers.

The board committees formally report to the board on their proceedings after each meeting and generally on all matters and activities for which they are responsible through the committee chairmen and via committee minutes.

## Board Committee Membership

Each independent non-executive director is a member of each board committee. No one other than the board committee chairmen and members is entitled to be present at a meeting of the Nomination Committee, the Audit Committee or the MDRC. Others may attend, however, at the invitation of the board committee. Executive directors are not members of the board committees. The Company Secretary is secretary to each of the board committees.

Alan Ferguson was appointed as Chairman of the Audit Committee with effect from the close of the 2011 Annual General Meeting, having been appointed as a non-executive director on 13th January 2011. Michael Roney took over the chairmanship of the Management Development and Remuneration Committee, also with effect from the close of the 2011 Annual General Meeting.

The current membership of the board committees is shown below:

	Nomination Committee	Audit Committee	MDRC
Tim Stevenson	Chairman	Invited to attend	Member
Neil Carson	Invited to attend	Invited to attend	Invited to attend
Alan Ferguson	Member	Chairman	Member
Sir Thomas Harris	Member	Member	Member
Robert MacLeod	–	Invited to attend	–
Larry Pentz	–	–	–
Michael Roney	Member	Member	Chairman
Bill Sandford	–	–	–
Dorothy Thompson	Member	Member	Member

The board takes into account the value of ensuring that board committee membership is refreshed when deciding chairmanship and membership of the committees, and in doing so seeks to ensure that undue reliance is not placed on particular individuals.

## Board Committee Terms of Reference

Each board committee has written terms of reference which have been approved by the board and are reviewed periodically to ensure that they comply with the latest legal and regulatory requirements and reflect developments in best practice. The terms of reference of the Audit Committee were reviewed in detail during the year ended 31st March 2012 in order, in part, to reflect the recommendations of the Code. Its amended terms were adopted by resolution of the board on 22nd November 2011.

The terms of reference of each board committee can be found in the Investor Relations / Corporate Governance section of the company's website, or may be obtained from the Company Secretary. The following is a summary of the terms of reference of each board committee:

### NOMINATION COMMITTEE

<b>Responsibilities</b>	Advising the board and making recommendations to the board on the appointment and, if necessary, the removal of executive and non-executive directors
<b>Membership</b>	All the independent non-executive directors and the group Chairman
<b>Chairman</b>	The group Chairman, Tim Stevenson (the group Chairman may not chair the committee when it is dealing with the matter of succession to the chairmanship of the company)
<b>Attending by invitation</b>	The Chief Executive, the Group Director, Human Resources and Environment, Health and Safety and external advisers when appropriate
<b>Quorum</b>	Two members, each of whom must be independent non-executive directors
<b>Number of meetings per year</b>	As required
<b>Committee report</b>	Page 105

### AUDIT COMMITTEE

<b>Responsibilities</b>	<p><b>Financial Reporting</b></p> <ul style="list-style-type: none"> <li>Monitoring the integrity of the group's reported financial information and reviewing significant financial reporting issues and judgments which they contain</li> </ul> <p><b>Internal Control and Risk Management Systems</b></p> <ul style="list-style-type: none"> <li>Keeping under review the adequacy and effectiveness of the group's internal financial controls and internal control and risk management systems</li> <li>Reviewing the company's procedures for handling allegations from whistleblowers</li> </ul> <p><b>Internal Audit</b></p> <ul style="list-style-type: none"> <li>Monitoring and reviewing the effectiveness of the group's internal audit function and approving the appointment and removal of the head of the internal audit function</li> <li>Considering and approving the remit of the internal audit function</li> <li>Reviewing and approving the annual internal audit plan</li> <li>Reviewing internal audit reports</li> </ul> <p><b>External Audit</b></p> <ul style="list-style-type: none"> <li>Considering and making recommendations to the board, to be put to shareholders for approval at the annual general meeting, in relation to the appointment, reappointment and removal of the external auditor</li> <li>Overseeing the relationship with the external auditor including approving its fee for audit services and its terms of engagement, assessing annually the effectiveness of the audit process and the independence and objectivity of the external auditor, taking into account the provision of any non-audit services</li> <li>Developing and implementing a policy on the supply of non-audit services by the external auditor and keeping this policy and any fees paid to the external auditor in respect of the supply of non-audit services under review</li> <li>Meeting regularly with the external auditor, including at least once a year, without management being present, to discuss its remit and any issues arising from the audit</li> <li>Reviewing and approving the annual external audit plan and reviewing the findings of the audit with the external auditor</li> </ul>
-------------------------	--

# Corporate Governance Report continued

## Board Committee Terms of Reference (continued)

### AUDIT COMMITTEE (continued)

<b>Membership</b>	All the independent non-executive directors, at least one of whom is required to have recent and relevant financial experience. The group Chairman is not a member
<b>Chairman</b>	Alan Ferguson. The chairman is required to be an independent non-executive director
<b>Attending by invitation</b>	The group Chairman, the Chief Executive, the Group Finance Director, the Head of Internal Audit and Risk and representatives from finance and other group functions as and when appropriate and necessary. The external auditor is invited to attend on a regular basis. The chairman of the committee may request the attendance of others at meetings including external advisers and, if so requested, executive directors will also make themselves available
<b>Quorum</b>	Two members
<b>Number of meetings per year</b>	At least four per year at appropriate times in the reporting and audit cycle and otherwise as required
<b>Committee report</b>	Pages 106 and 107

### THE MANAGEMENT DEVELOPMENT AND REMUNERATION COMMITTEE (MDRC)

<b>Responsibilities</b>	<ul style="list-style-type: none"> <li>• Determining on behalf of the board fair remuneration for the Chief Executive, the executive directors and the group Chairman, which, while set in the context of what the company can reasonably afford, recognises their individual contributions to the company's overall performance</li> <li>• Assisting the board in ensuring that the current and future senior management of the group are recruited, developed and remunerated in appropriate fashion</li> <li>• Determining the remuneration and terms and conditions of employment (including in respect of pension entitlement) of the Chief Executive and the executive directors and the remuneration and terms of appointment of the group Chairman</li> <li>• Reviewing the proposals of the executive for recommendation to the board on share option schemes, executive bonus / incentive schemes and employee share participation schemes</li> <li>• Reviewing training, development and succession plans for senior management of the company</li> <li>• Reviewing the disclosure to be made of directors' remuneration in the annual report</li> </ul>
<b>Membership</b>	All the independent non-executive directors and the group Chairman
<b>Chairman</b>	Michael Roney. The chairman of the committee is required to be an independent non-executive director
<b>Attending by invitation</b>	The Chief Executive, the Group Director, Human Resources and Environment, Health and Safety (except when their own performance and remuneration are discussed) and external advisers when appropriate
<b>Quorum</b>	Two members
<b>Number of meetings per year</b>	At least two per year and at such other times as the chairman of the committee requires
<b>Committee report</b>	Remuneration Report on pages 108 to 117

## Board and Committee Attendance

The attendance of members at board and board committee meetings in the year ended 31st March 2012 was as follows:

Director	Board		Nomination Committee		Audit Committee		MDRC	
	Eligible to attend	Attended	Eligible to attend	Attended	Eligible to attend	Attended	Eligible to attend	Attended
Tim Stevenson	7	6 <sup>(2)</sup>	2	1 <sup>(2)</sup>	–	4 <sup>(1)</sup>	4	3 <sup>(2)</sup>
Sir John Banham	3	3	1	1	–	2 <sup>(1)</sup>	2	2
Neil Carson	7	7	–	2 <sup>(1)</sup>	–	4 <sup>(1)</sup>	–	–
Alan Ferguson	7	7	2	2	4	4	4	4
Sir Thomas Harris	7	7	2	1 <sup>(3)</sup>	4	4	4	4
Robert MacLeod	7	7	–	–	–	4 <sup>(1)</sup>	–	–
Larry Pentz	7	7	–	–	–	–	–	–
Michael Roney	7	6 <sup>(4)</sup>	2	2	4	3 <sup>(4)</sup>	4	3 <sup>(4)</sup>
Bill Sandford	7	7	–	–	–	–	–	–
Dorothy Thompson	7	7	2	2	4	4	4	4
Alan Thomson	3	3	1	1	2	2	2	2
Robert Walvis	3	3	1	1	2	2	2	2

### Notes

<sup>(1)</sup> Includes meetings attended by invitation for all or part of meeting.

<sup>(2)</sup> Tim Stevenson was unable to attend the board meeting and the meetings of the Nomination Committee and the MDRC on 10th May 2011 as the date coincided with the annual general meeting of The Morgan Crucible Company plc of which he is Chairman.

<sup>(3)</sup> Sir Thomas Harris did not attend the meeting of the Nomination Committee on 29th March 2012, at which the matter of the appointment of an additional non-executive director following his prospective retirement from the board was discussed.

<sup>(4)</sup> Michael Roney was unable to attend the board meeting on 19th July 2011, the 2011 Annual General Meeting held later that day or the meetings of the Audit Committee and the MDRC held on the previous day because of coinciding commitments at Bunzl plc, where he is Chief Executive.

Where directors are unable to attend a board or board committee meeting, they communicate their comments and observations on the matter to be considered in advance of the meeting via the group Chairman, the Senior Independent Director or the relevant board committee chairman for raising as appropriate at the meeting.

Individuals' attendance at board and board committee meetings is considered, as necessary, during the one to one meetings conducted by the Chairman with directors as part of the formal annual review of their performance. Further information on performance evaluation is given under 'Evaluation of the Board, Board Committees and Directors' on pages 96 and 97.

## The Chief Executive's Committee

In discharging his responsibilities, the Chief Executive is assisted by the Chief Executive's Committee (CEC). The CEC is a management committee chaired by the Chief Executive. It is responsible for the recommendation to the board of strategic and operating plans and on making recommendations on matters reserved to the board where appropriate. It is responsible for the executive management of the group's businesses.

During the year ended 31st March 2012 the CEC comprised the Chief Executive; the Group Finance Director; the two other executive directors; the division directors who do not sit on the board; the Group

Director, Corporate and Strategic Development; the Group Director, Human Resources and Environment, Health and Safety; and the Company Secretary and Group Legal Director.

During the year ended 31st March 2012, the CEC met eight times. In order to more effectively use the time of its members, the CEC no longer meets formally every month (except in August) and after September 2011 moved to a programme of meeting formally every other month and informally on such other occasions as may be necessary.

The CEC has a number of sub-committees as referred to further on page 88.

## Effectiveness

### The Composition of the Board

The board comprises the Chairman (Tim Stevenson), the Chief Executive (Neil Carson), three other executive directors (Robert MacLeod, Larry Pentz and Bill Sandford), and four independent non-executive directors (Alan Ferguson, Sir Thomas Harris, Michael Roney and Dorothy Thompson).

The board seeks to ensure that both it and its committees have the appropriate range and balance of skills, experience, knowledge and independence to enable them to discharge their respective duties and

responsibilities effectively. Further information on board and committee appointments is set out on page 92 under 'Appointments to the Board and its Committees' and in the Nomination Committee Report on page 105.

The board is of the view that it is of a size such that the requirements of the business can be met, that changes to the board's composition and that of its committees can be managed without undue disruption, and that it is not so large as to be unwieldy. The board is also of the view that it includes an appropriate combination of executive and non-executive directors (and, in particular, independent non-executive directors). The size of the board, as well as its composition, is kept under review by the Nomination Committee.

Throughout the year ended 31st March 2012, and from that date up to the publication of this annual report, at least half the board members, excluding the Chairman, were non-executive directors determined by the board to be independent (as referred to further on page 93).

As announced on 22nd May 2012, Sir Thomas Harris will be retiring from the board at the close of the 2012 Annual General Meeting on 25th July 2012. Following his retirement there will be a majority of executive directors on the board pending the appointment of an additional independent non-executive director. As described in the Nomination Committee Report on page 105, the process for the appointment of an additional non-executive director has commenced.

# Corporate Governance Report continued

## Appointments to the Board and its Committees

The board, through the Nomination Committee, follows a formal, rigorous and transparent procedure for the selection and appointment of new directors to the board. The processes are similar for the appointment of executive and of non-executive directors.

The Nomination Committee leads the process for board appointments and makes recommendations to the board. Further information on the Nomination Committee and its work is set out in the Nomination Committee Report on page 105.

In considering board composition, the Nomination Committee assesses the range and balance of skills, experience, knowledge and independence on the board, identifies any gaps or issues, and considers any need to refresh the board. If it is determined in light of such evaluation that it is necessary to appoint a new non-executive director, the Committee prepares a description of the role and of the capabilities required for the appointment and sets objective selection criteria accordingly. In doing so it has regard for the benefits of diversity on the board, including gender diversity. This is discussed more fully under 'Boardroom Diversity' below.

The Committee considers any proposed recruitment in the context of the company's strategic priorities, plans and objectives as well as the prevailing business environment. The Committee also takes into account succession plans in place (and this is discussed further under 'Succession Planning' below). The Committee seeks prospective board members who can make positive contributions to the board and its committees, including the capability to challenge on such matters on strategy. This is balanced with the desire to maintain board cohesiveness.

The Committee uses external search consultancies to assist in the appointment process. Appointments are ultimately made on merit against the agreed selection criteria.

The board recognises the importance of developing internal talent for board appointments as well as recruiting externally. In this regard, the company has in place various mentoring arrangements and various types and levels of management development programmes.

The board also recognises the importance of recruiting non-executive directors with the necessary technical skills and knowledge relevant to the work of its committees and who have the potential to take over as committee chairmen.

## Succession Planning

The board, through the MDRC, is actively engaged in ongoing succession planning in order to ensure that plans are in place for the orderly and progressive refreshing of the board and for the identification and development of senior management with potential for board and CEC positions.

Each division and corporate function across the group prepares and maintains succession plans with the assistance of divisional and group Human Resources. The CEC rigorously reviews these plans in detail annually, with a focus on ensuring an appropriate pipeline of talented and capable individuals to fill senior roles. A key aim is to ensure broad experience and encourage cross fertilisation across the group's divisions. The CEC also considers the identification and development of high potential individuals. The review of the plans by the CEC generally leads to further refinement and changes, resulting in the final plans which are submitted to the MDRC. The MDRC reviews succession policy, the succession plan and the management development and succession planning process each year.

## Boardroom Diversity

The board believes that diversity is important for board effectiveness. The board has followed carefully the debate regarding the representation of women in the boardroom following the publication of Lord Davies' report, 'Women on Boards', in February 2011 (the Davies Report).

### Statement on Board Diversity

In response to the Davies Report, on 28th November 2011 the board published the following statement on board diversity. It is set out in the Investor Relations / Corporate Governance section of the company's website.

"The board of Johnson Matthey has followed the important debate around the recommendations of Lord Davies' review on Women on Boards and the question of boardroom diversity. We do not think quotas, for the proportion of women on the board or otherwise, are appropriate for a number of reasons. We believe all appointments should be made on merit rather than through positive discrimination. We are clear, however, that maintaining an appropriate balance around our board table through a diverse mix of skills, experience, knowledge and background is of paramount importance. Gender diversity is a significant element of this.

At present the board has one woman member in a board of nine. When we next make an appointment to the board, our brief to search consultants in the selection process as regards external candidates will be to review candidates from a variety of backgrounds and perspectives. The consultants will be asked to work to a specification which will include the strong desirability of producing a long-list of possible candidates which fully reflects the benefits of diversity, including gender diversity. Any appointment of an internal candidate, while similarly based on merit, will also take into account the benefits of diversity, including gender diversity.

Looking beyond the board to our wider workforce, we recognise the importance of diversity, including gender diversity, and the benefits this can bring to our organisation. With regard to gender diversity specifically, Johnson Matthey faces challenges similar to those faced by other organisations in the chemical, technology and manufacturing sectors. To address these, we have policies and processes in place which are designed to support gender diversity in employee recruitment, development and promotion and we are committed to ensuring that women have an equal chance with men of developing their careers within our business. Finally, we encourage gender diversity at the early career stage by working outside Johnson Matthey to encourage women to enter scientific and industrial fields."

## Gender Diversity Statistics

	Number	Proportion
The board	1 woman on the board as at the date of publication of this annual report	11% of board membership
Senior management	32 women out of 196 total as at 31st March 2012	16% of senior management
Graduate intake	–	30% of graduate intake
The group	2,205 women employees as at 31st March 2012	22% of group employees

The company has taken, and continues to take, several steps to promote diversity, including gender diversity, at senior management level and in the boardroom. The basis of these measures is in developing policies and processes that prevent bias in relation to recruitment and promotion, but the key to progress is in actively promoting diversity, ensuring that other positive measures are taken. These include requesting balanced shortlists when recruiting, looking at diversity mix in company events and conferences, actively discussing diversity in succession planning, promoting industrial and scientific careers to young women and developing family friendly and flexible employment policies. There are challenges to overcome, particularly in respect of gender diversity, given the sector within which the group operates but the group is making good progress.

### Boardroom Diversity Policy

Following the publication of the Davies Report, in October 2011 the FRC confirmed its intention to include revisions in the next version of the amended Code to be published in 2012 in order to accommodate the Davies Report recommendation in respect of diversity policy. These revisions will require companies to include in the section of the annual report describing the work of the nomination committee a description of the board's policy on diversity, including gender, any measurable objectives that it has set for implementing the policy and progress on achieving the objectives. The changes will formally apply to companies with a financial year commencing on or after 1st October 2012, and so for Johnson Matthey's year ending 31st March 2014.

The board is in the process of reviewing the broad question of diversity within the group and is considering a policy for diversity.

### Board Evaluation Process

The FRC also announced in October 2011 that a new supporting principle would be included in the Code to the effect that evaluation of the board should consider the balance of skills, experience, independence and knowledge of the company on the board, its diversity, including gender, how the board works together as a unit and other factors relevant to its effectiveness. Again, this change will be incorporated in an updated version of the Code to be published in 2012. The board is following this principle in its board and committee evaluation process which is underway as at the date of publication of this annual report.

Further information is set out under '2011/12 Evaluation Process' on pages 96 and 97.

### Appointments to the Board

As described under 'Appointments to the Board and its Committees' on page 92, the search for board candidates is conducted, and appointments made, on merit, against objective selection criteria having due regard for the benefits of diversity on the board, including gender. Further information on diversity in the context of board appointments is contained in the Nomination Committee Report on page 105.

### Board Balance – Independence of the Non-Executive Directors and of the Chairman

The question of the independence of the non-executive directors is relevant to board balance.

Director independence was reviewed by the board at its meeting on 29th March 2012. In making its determination of independence in respect of a director, the board considers all relevant relationships and circumstances, including those set out in the Code. The board considers, for example, whether the director has, or has had within the last three years, a material business relationship with the company, holds cross directorships or has significant links with other directors through involvement in other companies or bodies, or represents or has a material connection to a controlling or significant shareholder or is nominated by a shareholder.

The board considers that there are no business or other relationships or circumstances which are likely to affect,

or may appear to affect, the judgment of any non-executive director and each non-executive director was determined by the board to be independent in character and judgment.

There are no cross directorships or reciprocal directorships among the directors; no two directors are also directors of another company.

Tim Stevenson was considered by the board to meet the independence criteria set out in the Code on his appointment as a non-executive director and Chairman Designate in March 2011 and on his appointment as Chairman in July 2011. Sir John Banham, who retired as Chairman at the close of the 2011 Annual General Meeting in July 2011, was not involved in the selection or appointment of Mr Stevenson as Chairman.

Information on the company's procedures for authorising potential conflicts of interest is set out under 'Directors' Conflicts of Interest' on page 95.

# Corporate Governance Report continued

## Time Commitment of the Chairman and of the Non-Executive Directors

The board recognises that it is vital that all directors should be able to dedicate sufficient time to the company to effectively discharge their responsibilities.

The time commitment required by the company is considered by the board and by individual directors on appointment. The letters of appointment of the Chairman and of each non-executive director set out the expected minimum time commitment for their roles. Each undertake that they will have sufficient time to meet what is expected of them for the proper performance of their duties and acknowledge that there may, on occasion, be a need for additional time commitment. The minimum time commitment considered by the board to be necessary for a non-executive director and provided in the letters of appointment is two days per month following induction. In his letter of appointment, the Chairman undertook to devote such time to the affairs of the company as is required by his duties as Chairman.

The other significant commitments of the Chairman and of each non-executive director are disclosed to the board before appointment, with an indication of the time commitment involved. The board requires to be, and is, informed of subsequent changes as they arise.

Details of Tim Stevenson's other significant commitments are set out on page 83. There were no changes to these during the year ended 31st March 2012. On 8th May 2012 it was announced by The Morgan Crucible Company plc that Mr Stevenson would be retiring as chairman of that company on 31st July 2012.

Details of the non-executive directors' other significant commitments are set out on page 83. Alan Ferguson has, since his appointment to the board, been appointed as a non-executive director of Croda International Plc (in July 2011), where he has chaired the audit committee since August 2011. He was also appointed as a non-executive director of The Weir Group PLC in December 2011 and has chaired its audit committee since May 2012. These appointments were reported to the board as they arose. The board assessed the impact of these appointments and believes that Mr Ferguson continues to be able to manage his time commitments and allocate sufficient time to the company to discharge his responsibilities effectively, including his responsibilities as Chairman of the Audit Committee.

## Terms of Appointment of the Non-Executive Directors

The non-executive directors are appointed for specified terms subject to annual election and to the provisions of the Companies Act 2006 (the 2006 Act) relating to the removal of a director.

Any term beyond six years for a non-executive director is subject to particularly rigorous review and takes into account the need for progressive refreshing of the board. No non-executive director who will be proposed for re-election at the 2012 Annual General Meeting on 25th July 2012 will then have served longer than six years.

The terms and conditions of appointment of the non-executive directors and the contracts of service of the executive directors with the company are available to be inspected by any person at the registered office of the company during normal business hours. They are also available for inspection at the annual general meeting of the company prior to the meeting and during the meeting. Accordingly, they will be available for inspection at Merchant Taylors' Hall, 30 Threadneedle Street, London EC2R 8JB from 10.00 am on Wednesday 25th July 2012 until the conclusion of the 2012 Annual General Meeting.

## Annual Re-Election of Directors

The company's Articles of Association require one third of the board to retire by rotation at each annual general meeting. However, the Code provides that all directors of FTSE 350 companies should be subject to re-election by their shareholders every year subject to continued satisfactory performance. In accordance with this provision, the board has decided that all directors will retire at each annual general meeting and offer themselves for re-election by shareholders.

Each director stood for re-election at the 2011 Annual General Meeting. All directors will be offering themselves for re-election at the 2012 Annual General Meeting except for Sir Thomas Harris, who will be retiring from the board at the close of that meeting.

Biographical details of each of the directors, including details of their other directorships and responsibilities and relevant previous positions held, together with any further relevant factors including details of their skills and experience and contributions to the board, are set out in the circular to shareholders in respect of the 2012 Annual General Meeting. This is to assist shareholders to take an informed decision on the resolutions for their re-election.

The circular sets out to shareholders why the board believes each director should be re-elected based on continued satisfactory performance in the role. In the circular, the Chairman confirms to shareholders that, following formal performance evaluation, the performance of each non-executive director proposed for re-election continues to be effective and to demonstrate commitment to the role (including commitment of time for board and board committee meetings). Further information on performance evaluation is given under 'Evaluation of the Board, Board Committees and Directors' on page 96.

## Information and Support

The board has in place processes to ensure that it is supplied in a timely manner with information in a form and of a quality appropriate to enable it to discharge its duties. The Chairman, through the Company Secretary and with the support of the executive directors and management, ensures that this information is of high quality in terms of its accuracy, clarity, appropriateness, comprehensiveness and currency.

Directors are able to seek clarification or amplification from management where necessary.

The role of the Company Secretary in providing support and information is set out on page 87.

## Independent Professional Advice

The non-executive and the executive directors have access to independent external professional advice (such as legal and financial advice) at the company's expense where they judge this necessary to discharge their responsibilities as directors.

## Director Induction, Familiarisation, Training and Development

### Induction

The company puts in place full, formal and tailored induction programmes for all new directors on joining the board. While this takes into account the directors' different backgrounds and experience, the induction is aimed to be a broad introduction to the group's businesses and its areas of significant risk. Key elements of the induction process are meeting the executive directors and senior and middle management individually and collectively and visiting the group's major operating sites.

Since their appointments Tim Stevenson and Alan Ferguson have undergone tailored induction programmes facilitated by the Company Secretary. These programmes included meetings with the Chief Executive, the executive directors and senior management in order to be briefed on group strategy and on individual businesses, briefing sessions with key group functions and visits to the principal UK sites. The programmes also allowed Mr Stevenson and Mr Ferguson to familiarise themselves with any issues arising from service on, or chairmanship of, board committees. As part of his induction programme, Tim Stevenson had separate meetings with several major shareholders.

#### **Familiarisation, Training and Development**

To ensure the effective fulfilment of the roles of the directors on the board and on the board committees and to ensure that their contributions remain informed and relevant, various steps are taken to ensure that all directors are able to gain and to continually update and refresh their knowledge and skills. The intention is that all directors have familiarity with, and appropriate knowledge of, the company and gain access to its operations and employees. The board ensures that the company provides the necessary resources to allow this to happen.

Each board meeting includes one or more business or strategy presentations from senior managers. To ensure that the board is kept up to date on important matters, including environmental, legal, governance and regulatory developments, presentations are also made to the board by both external and internal advisers.

The board also holds at least one board meeting per year at one of the group's operational sites and takes the opportunity to tour the site and discuss business issues, risks and strategy with local management. During the year ended 31st March 2012, the board visited Fine Chemicals' API manufacturing facility at Riverside, Conshohocken, Pennsylvania, USA in September 2011 and Precious Metal Products' Catalysts and Chemicals manufacturing facility at Royston, Hertfordshire in the UK in March 2012. The board toured these sites and received presentations from management on the recently acquired facility at Riverside and on Catalyst and Chemicals' new products respectively. Individual non-executive directors also undertake site visits.

Such presentations, meetings and site visits assist the non-executive directors in familiarising themselves with, and gaining a greater insight into, the group's businesses and help to give a balanced overview of the group. They enable the non-executive directors to continue to develop and refresh their knowledge and understanding of the group's businesses, the markets in which it operates and its key relationships. They are also important for building links with the group's employees.

As part of the annual performance review process referred to under 'Evaluation of the Board, Board Committees and Directors' on page 96, the Chairman meets with each director annually on a one to one basis to review and agree their individual training and development requirements.

#### **Indemnification of Directors and Insurance**

Under Deed Polls dated 20th July 2005 the company granted indemnities in favour of each director of the company in respect of any liability that he or she may incur to a third party in relation to the affairs of the company or any group member. Such indemnities were in force during the year ended 31st March 2012 for the benefit of all persons who were directors of the company at any time during the year and remain in force for the benefit of all persons who are directors of the company as at the date when this Report of the Directors was approved and from that date up to the date of publication of this annual report.

Under Deed Polls also dated 20th July 2005 the company granted indemnities in favour of each director of its subsidiaries in respect of any liability that he or she may incur to a third party in relation to the affairs of any group member. Such indemnities were in force during the year ended 31st March 2012 for the benefit of all persons who were directors of the subsidiaries at any time during the year and remain in force for the benefit of all persons who are directors of the subsidiaries as at the date when this Report of the Directors was approved and from that date up to the date of publication of this annual report.

The company has in place appropriate directors and officers liability insurance cover in respect of legal action against, amongst others, its executive and non-executive directors.

Copies of the Deed Polls and the company's Articles of Association are available to be inspected by any person at the registered office of the company during normal business hours. They are also available for inspection at the annual general meeting of the company prior to the meeting and during the meeting. Accordingly, they will be available for inspection at Merchant Taylors' Hall, 30 Threadneedle Street, London EC2R 8JB from 10.00 am on Wednesday 25th July 2012 until the conclusion of that meeting.

Neither the company nor any subsidiary has indemnified any director of the company or a subsidiary in respect of any liability that he or she may incur to a third party in relation to a relevant occupational pension scheme.

#### **Directors' Conflicts of Interest**

Under the Companies Act 2006 (the 2006 Act), a director must avoid situations in which he or she has, or can have, a direct or indirect interest that conflicts with, or may conflict with, the interests of the company. This covers, in particular, the exploitation of property, information or opportunity and it applies whether or not the company is in a position to take advantage of it. There is no breach of this duty if authorisation of the conflict situation has been given by the independent directors. The company's Articles of Association give power to the independent directors to give such authorisation but board authorisation is not permitted in respect of the acceptance of benefits from third parties. Directors also have a duty under the 2006 Act to make prior declaration to the other directors of the nature and extent of any direct or indirect interest in a proposed transaction or arrangement with the company. Additionally, directors must declare the nature and extent of any direct or indirect interest in an existing transaction or arrangement entered into by the company, to the extent that the interest has not been declared under the duty in respect of proposed transactions or arrangements.

# Corporate Governance Report continued

Established procedures in accordance with the company's Articles of Association are in place to ensure compliance with the directors' conflicts of interest duties under the 2006 Act and for dealing with conflict of interest situations. The company has complied with these procedures during the year ended 31st March 2012 and from that date up to the date of publication of this annual report. During the year, details of any new conflicts or potential conflict matters were submitted to the board for consideration and, where appropriate, these were approved.

In March 2012, the board undertook an annual review of the register of previously approved conflict or potential conflict matters and, to the extent that these were still relevant, agreed that they should continue to be authorised on the terms previously set out. In each case, the review was undertaken by directors who were genuinely independent of the conflict matter. Authorised conflict or potential conflict matters will continue to be reviewed by the board on an annual basis.

The board confirms that the company complies with its procedures in place to authorise conflict situations and is satisfied that its powers to authorise conflict situations are being exercised properly and effectively and in accordance with the company's Articles of Association.

## Evaluation of the Board, Board Committees and Directors

With the aim of improving effectiveness, the board undertakes a formal annual evaluation of its own performance and that of its committees and individual directors. The evaluation, which is led by the Chairman, aims to be as rigorous and objective as possible.

The process for evaluation of the board considers its strengths and weaknesses, the range and balance of skills, experience, independence and knowledge of the company on the board, its diversity, including gender diversity, how the board works together as a unit and any other factors considered relevant to its effectiveness. Individual evaluation aims to show whether each director continues to contribute effectively and to demonstrate commitment to the role (including time commitment). The Chairman acts on the results of the performance evaluation. The strengths are recognised and any weaknesses addressed.

## 2010/11 Evaluation Process

Following the appointment of Tim Stevenson as Chairman Designate in March 2011, the board instigated a formal evaluation of its performance and that of its committees and individual directors. This evaluation was led by Tim Stevenson and was externally facilitated by an independent consultant experienced in board evaluation. This was the first time that the board had undertaken an externally facilitated evaluation process. The external facilitator had no other connection with the company and was not subject to any conflict of interest. The evaluation was designed, in particular, to allow Tim Stevenson to gain an objective overview and evaluation of the workings of the board and its committees, of strengths and weaknesses, of areas for further improvement and of the contributions of individual directors. The review was intended to build on the internal board review carried out by the Company Secretary in 2009/10.

The methodology of the evaluation included a series of detailed one to one meetings with each director and the Company Secretary in order to gather views and feedback. The external evaluator also attended one full board meeting as an observer. The review covered the following main areas, which were determined by the Chairman and the external evaluator to be of most importance or value to the board:

- Overall board working and efficiency;
- Board composition and balance;
- Succession planning;
- Strategy process;
- Financial and non-financial monitoring;
- Risk management and risk management systems; and
- Board development (including training and site visits).

The full evaluation process was not complete at the date of publication of the 2011 annual report and has since been concluded. Overall feedback from the evaluation was provided in the form of a presentation by the external evaluator at a meeting of the board in May 2011, which then debated the findings. The board also discussed the evaluation process itself and agreed that the external evaluation was broadly effective. The external evaluator also provided a comprehensive written report to the Chairman, feedback to the board committee chairmen and individual feedback for the Chief Executive.

Good progress was noted across all the areas of review, building on initiatives and action developed as a result of prior effectiveness reviews. Certain suggestions were made to ensure continuing progress. The evaluation process gave assurance that each director continued to contribute effectively and demonstrated commitment to the role.

The Chairman agreed with the board that no actions or changes to board or committee practice were required in the immediate term following the review but that the output would be considered further following his appointment as Chairman in July 2011 and in the course of the review for 2011/12 to ensure continuing improvement.

## 2011/12 Evaluation Process

As the 2010/11 review process had been externally facilitated, the board decided to conduct an internal review process during 2012. The evaluation of the performance and effectiveness of the board and its committees and individual directors is being conducted by the Chairman in collaboration with the board committee chairmen. The evaluation is not complete at the date of publication of this annual report.

The evaluation process has included one to one interviews by the Chairman with each director and the Company Secretary. The topics being discussed, which were determined by the Chairman to be the principal areas of focus following the externally facilitated review in the previous year, include:

- Strategy and strategy focus;
- Monitoring financial and non-financial performance;
- Stakeholder relationships;
- Risk and uncertainties;
- Executive remuneration; and
- Key themes for discussion focus in 2012/13.

In carrying out the evaluation, the board is following the new supporting principle to be included in the Code, as announced by the FRC in October 2011, to the effect that evaluation of the board should consider, amongst other things, the board's diversity, including gender diversity. Further information is set out under 'Board Evaluation Process' on page 93.

The Chairman proposes to report the outcome of the evaluation process to the board meeting in July 2012. The board will debate the findings and any lessons to be learned and will agree any follow up actions and responsibilities as appropriate. The key outcomes of the evaluation processes and the steps the board intends to take to address any issues will be reported in the 2013 annual report.

#### **Future Reviews**

The board intends to undertake an externally facilitated evaluation process at least every three years. In the intervening years, the review will be facilitated by the Chairman supported by the Senior Independent Director and the Company Secretary.

#### **Review of the Chairman's Performance**

The non-executive directors recognise that the Chairman's effectiveness is vital to that of the board. Led by the Senior Independent Director, the non-executive directors are responsible for performance evaluation of the Chairman and for providing a fair and balanced assessment to shareholders.

In view of the change in the chairmanship of the company with the appointment of Tim Stevenson as Chairman on 19th July 2011, a separate formal review of the Chairman's performance was not undertaken during the year ended 31st March 2011 but feedback on the Chairman's performance was reflected in the externally facilitated evaluation referred to on page 96. A review of the Chairman's performance was, however, undertaken in the year ended 31st March 2012. On 28th March 2012, the non-executive directors, led by the Senior Independent Director, met separately, without the Chairman being present, to discuss the Chairman's performance. In doing so they took into account the views of executive directors. The results were subsequently reported by the Senior Independent Director to the board. They considered that the Chairman demonstrated effective leadership and that his performance and contribution were strong.

## **Accountability**

### **The Audit Committee**

The membership of the Audit Committee is set on page 90.

The terms of reference of the Audit Committee are summarised on pages 89 and 90. The terms of reference can be found in the Investor Relations / Corporate Governance section of the company's website or may be obtained from the Company Secretary.

The Audit Committee Report, which describes the work of the Audit Committee in discharging its responsibilities, is set out on pages 106 and 107.

### **Financial Experience**

The board is satisfied that at least one member of the Audit Committee, Alan Ferguson, has recent and relevant financial experience. His biographical details are set out page 83.

### **Financial and Business Reporting**

In its reporting to shareholders the board recognises its responsibility to present a fair, balanced and understandable assessment of the group's position and prospects. This responsibility covers the Annual Report and Accounts and extends to interim and other price sensitive public reports and reports to regulators as well as to information required to be presented by statutory requirements.

The Business Review on pages 4 to 75 sets out explanations of the basis on which the company generates or preserves value over the longer term (the business model) and the strategy for delivering the objectives of the company. This annual report is intended to provide the information necessary to enable an assessment of the company's performance, the business model and its strategy.

The group's organisational structure is focused on its three divisions. These are all separately managed but report to the board through a board director. The CEC receives and reviews monthly summaries of financial results from each division through a standardised reporting process. Forecasts are prepared monthly throughout the year. The group has in place a comprehensive annual budgeting and planning process including plans for the following two years. Budgets are approved by the board. Variances from budget are closely monitored. In addition to the annual budgeting process, there is a ten year strategy review process as referred to on page 12.

### **Directors' and Auditor's Responsibility**

A statement of the directors' responsibility for preparing the Annual Report and Accounts is set out on page 120. A statement by the auditor, KPMG Audit Plc about its reporting responsibilities is set out on page 121.

### **Risk Management and Internal Control**

The board is ultimately responsible for maintaining sound risk management and internal control systems (including financial controls, controls in respect of the financial reporting process and controls of an operational and compliance nature).

As the company is the parent company of a group, its internal control systems are on a groupwide basis and the review of their effectiveness is implemented and reported from a groupwide perspective. The directors' review of the effectiveness of internal control systems and the application of the Revised Guidance for Directors on the Combined Code issued by the FRC in October 2005 (Revised Turnbull Guidance) extends to the company and its subsidiaries.

The group's risk management systems and internal control systems are designed to meet the group's needs and manage the risks to which it is exposed, including the risk of failure to achieve business objectives, but such risks cannot be eliminated. Such systems can only provide reasonable, but not absolute, assurance against a failure to meet business objectives or against the risk of material misstatement or loss. They can never completely protect against such factors as unforeseeable events, human fallibility or fraud.

The board confirms that there is a framework of continuous and ongoing processes (established in accordance with the Revised Turnbull Guidance) in place for identifying, evaluating and managing the significant risks faced by the group. These processes are regularly reviewed by the board and the Audit Committee as appropriate and have been in place during the year ended 31st March 2012 and up to the date of approval of this annual report.

The board is responsible for determining the nature and extent of the significant risks it is willing to take in achieving its strategic objectives. The board's view of the group's key strategic and operating risks and how the company seeks to manage those risks is set out on pages 20 to 23.

# Corporate Governance Report continued

## The Risk Management and Internal Control Systems

The group's risk management and internal control systems comprise group policies, procedures and practices covering a range of areas including the appropriate authorisation and approval of transactions, the application of financial reporting standards and the review of financial performance and significant judgments.

The Group Control Manual, which is distributed to all group operations, clearly sets out the composition, responsibilities and authority limits of the various board and executive committees and also specifies what may be decided without central approval. It is supplemented by other specialist policy and procedures manuals issued by the group, divisions and individual businesses or departments.

## Review of Effectiveness of the Group's Risk Management and Internal Control Systems

A key responsibility of the board is for reviewing, assessing and confirming the adequacy and effectiveness of the group's risk management and internal control systems (including financial controls, controls in respect of the financial reporting process and controls of an operational and compliance nature). The board has delegated part of this responsibility to the Audit Committee. In addition to determining risk appetite, the board specifically reviews EHS strategy, performance and assurance processes as well as the performance of group HR and IT. The Audit Committee reviews other key risk areas and the assurance processes in respect of the management of risk.

The board, through setting its own annual agenda plan and in approving that of the Audit Committee, defines the process to be undertaken for the review, including the scope and frequency of assurance reports received throughout the year. The board and Audit Committee agenda plans are designed to ensure that all significant areas of risk are reported on and considered during the course of the year.

The Audit Committee receives and considers regular reports and presentations from management, from the heads of group corporate functions such as group treasury and from internal audit. These identify and provide assessments of areas of significant risk either for the businesses or the group as a whole and of the effectiveness of the control systems in managing those risks. Any significant issues are highlighted and discussed. The Audit Committee is thus able to focus on the key risk areas and effectively assess how they have been identified, evaluated and managed. In assessing the effectiveness of the control systems, the Audit Committee considers

carefully the impact of any weaknesses, whether necessary actions are being taken promptly and whether more extensive monitoring is needed. Amongst other matters, the Audit Committee reviews the group's credit control procedures and risks, controls over precious metals, IT controls and the group's whistleblowing procedures. The Audit Committee also reviews the performance of both the internal and external auditors. The Audit Committee also considers observations by the external auditor in relation to internal financial control.

The group's internal audit function plays an important part in the assessment of the risks facing the group and is responsible for independently monitoring and assessing the adequacy and effectiveness of the group's systems of internal financial control. Internal audit reports on control effectiveness to the Audit Committee in line with the agreed audit plan and Audit Committee agenda plan. The internal audit function is a unified, groupwide function under the leadership of the Head of Internal Audit and Risk. The global nature of the function allows for more holistic assurance and consistency in approach. The Head of Internal Audit and Risk has a dual reporting line to the Group Finance Director and to the Chairman of the Audit Committee. The Audit Committee approves the plans for internal audit reviews and receives the reports produced by the internal audit function on a regular basis. Plans for corrective action and control improvement are agreed with management to address any issues, non-compliance or control deficiencies identified by internal audits. Internal audit follows up the implementation of its recommendations, including any recommendations to improve internal controls, and reports the outcome to senior management and to the Audit Committee.

Each year businesses are required to formally review their financial and non-financial controls and their compliance with group policies and statutory and regulatory obligations and to provide assurance on these. The results of these reviews are collated and summarised by the internal audit function and a report is made annually to the Audit Committee.

The Audit Committee conducts an annual assessment of effectiveness on behalf of the board in order for the board to report on effectiveness in the annual report. The Audit Committee reports to the board on the operation and effectiveness of the risk management and internal control systems and such reports are considered by the board in forming its view of their effectiveness. A report from the Audit Committee on its activities and on the work of internal audit is given on pages 106 and 107.

The board, in part through the Audit Committee, has conducted an overarching review of the effectiveness of the company's risk management and internal control systems, covering all material controls, including financial, operational and compliance controls, for the year ended 31st March 2012 and up to the date of its approval of this annual report on 6th June 2012. The review process accords with the Revised Turnbull Guidance. Following this review, the group is enhancing and standardising the stock take procedures across its gold and silver refineries.

## Remuneration

The board has established a remuneration committee, the Management Development and Remuneration Committee (MDRC).

The membership of the MDRC is set on page 90.

The terms of reference of the MDRC are summarised on page 90. The terms of reference can be found in the Investor Relations / Corporate Governance section of the company's website or may be obtained from the Company Secretary.

The Remuneration Report, which describes the work of the MDRC, is set out on pages 108 to 117.

## Relations with Shareholders

### Dialogue with Shareholders

The board welcomes the opportunity to openly engage with shareholders as it recognises the importance of a continuing effective dialogue (whether with major institutional investors, private or employee shareholders) based on the mutual understanding of respective objectives. The board as a whole takes responsibility for ensuring that such dialogue takes place.

### Reporting of Results, Interim Management Statements and the Investor Day

The company reports formally to shareholders when its full year results are published in June and its half year results are published in November. The company's results are posted on the Investor Relations / Results Centre section of the company's website. The full year results are included in the company's annual report.

At the same time as publication of the results, executive directors give presentations on the half year and full year results in face to face meetings with institutional investors, analysts and the media in London. Live webcasts of these results presentations are available on the company's website.

The company's first quarter and third quarter Interim Management Statements (issued respectively on the day of the annual general meeting in July and in early February each year) are also made available on the Investor Relations / Results Centre section of the company's website.

The company also holds an annual 'Investor Day' for its institutional investors and analysts. At the 2012 Investor Day held in London on 1st February, the company gave a presentation in respect of its Precious Metal Products Division. This was designed to provide a deeper understanding of the division, its strategy and drivers and to highlight why the division is such an intrinsic part of the group. The presentation also outlined the group's role in the global platinum group metals market and the dynamics of the division's businesses. It also explained the role of R&D in adding value and providing future growth opportunities. A live webcast of the Investor Day presentations is made available on the company's website. A copy of the Investor Day presentation is posted on the Investor Relations / Presentations section of the company's website.

## Shareholder Contact

While the Chairman takes overall responsibility for ensuring that the views of shareholders are communicated to the board as a whole and that all directors are made aware of major shareholders' issues and concerns, contact with major shareholders is principally maintained by the Chief Executive and the Group Finance Director. They maintain a continual dialogue with institutional shareholders throughout the year on performance, plans and objectives through a programme of regular one to one and group meetings and they ensure that shareholder views are communicated to the board. The group's Investor Relations Department acts as a focal point for contact with investors throughout the year.

The Chairman is available to meet with institutional investors to hear their views and discuss any issues or concerns, including on governance and strategy. The Senior Independent Director and the other non-executive directors are also available to meet with major shareholders if requested. Other than meetings held with shareholders by Tim Stevenson as part of his induction programme, no such meetings were held or requested during the year ended 31st March 2012 or from that date to the date of publication of this annual report.

The board believes that appropriate steps have been taken during the year to ensure that the members of the board, and in particular the non-executive directors, develop an understanding of the views of major shareholders about the company. Such steps have included, for example, analysts' and brokers' briefings, consideration by the board of monthly brokers' reports and of feedback from shareholder meetings on a six-monthly basis. The canvassing of major shareholders' views for the board in a detailed investor survey is usually conducted every two years by external consultants. At its meeting in November 2011, the board considered a perception analysis report prepared for the company by Smith's Corporate Advisory dated October 2011. The purpose of this was to ascertain the views and opinions of a broad range of both shareholders and non-shareholders.

Also, as reported in the Remuneration Report in the 2011 annual report, a selection of major institutional shareholders and institutional investor bodies were consulted in detail by the MDRC during 2010/11 in a collective consultation exercise as part of its comprehensive review of executive director and senior management remuneration arrangements within the group.

The board takes the view that these methods, taken together, are a practical and efficient way for the board, including the Senior Independent Director, to keep in touch with shareholder opinion and views and to reach a balanced understanding of major shareholders' objectives, issues and concerns.

## Annual General Meetings

An important part of effective communication with shareholders is the Annual General Meeting.

The company's annual general meeting takes place in London. Notice of the meeting and any related papers are sent to shareholders at least 20 working days before the meeting and are also published on the Investor Relations / Shareholder Centre / Annual General Meeting section of the company's website. The circular sent to shareholders with the notice of meeting aims to set out a balanced and clear explanation of each resolution to be proposed.

All directors, including the chairmen of the Nomination Committee, the Audit Committee and the MDRC, who are able to attend the annual general meetings do so. The entire board was in attendance at the company's 2011 Annual General Meeting, except for Michael Roney who was unable to attend the meeting because of coinciding commitments at Bunzl plc, where he is Chief Executive.

In order to better communicate with shareholders a business presentation is made by the Chief Executive at the annual general meeting. Shareholder participation at the meeting is encouraged. All directors in attendance are available to answer questions in their capacity as directors or as committee chairmen, formally through the Chairman during the meeting and informally afterwards.

At the meetings, the company proposes separate resolutions on each substantially separate issue, including on the Annual Report and Accounts. For each resolution, shareholders have the option through the proxy appointment forms provided to direct their proxy to vote either for or against the resolution or to withhold their vote. The proxy form itself and the announcement of the results of a vote make it clear that a 'vote withheld' is not legally a vote and is not counted in the calculation of the proportion of the votes cast for and against the resolution. All valid proxy appointments received are properly recorded and counted.

All resolutions at the annual general meeting are decided on a poll as required by the company's Articles of Association (rather than on a show of hands) and poll voting is carried out by electronic means.

The results of the poll are announced to the market as soon as possible and posted on the Investor Relations / Shareholder Centre / Annual General Meeting section of the company's website. The announcement shows votes for and against as well as votes withheld.

Details of the annual general meeting to be held on 25th July 2012 are set out in the circular to shareholders accompanying this annual report and the resolutions to be proposed are summarised under '2012 Annual General Meeting' on page 100.

# Other Statutory Information

## → Contents

100	2012 Annual General Meeting	103	The Interests of Directors in the Company's Shares
100	Dividends	103	Directors' Interests in Contracts
101	Dividend Payments and DRIP	103	Change of Control
101	Share Capital and Control	104	Disabled Persons
101	Listing of the Company's Shares	104	Employee Involvement
101	American Depositary Receipt Programme	104	Use of Financial Instruments
102	Employee Share Schemes	104	Branches
102	Interests in Voting Rights	104	Policy on Payment of Commercial Debts
102	Contracts with Controlling Shareholders	104	Charitable Donations
102	Directors	104	Political Donations and Expenditure
103	Appointment and Replacement of Directors	104	Financial Assistance Received from Government
103	The Company's Articles of Association	104	Auditors and Disclosure of Information
103	Powers of the Directors	104	Management Report

### 2012 Annual General Meeting

The 2012 Annual General Meeting of the company will be held at 11.00 am on Wednesday 25th July 2012 at Merchant Taylors' Hall, 30 Threadneedle Street, London EC2R 8JB.

The notice of the 2012 Annual General Meeting is contained in the circular to shareholders accompanying this annual report, together with an explanation of the resolutions to be considered at the meeting. The notice of the 2012 Annual General Meeting will be published on the Investor Relations / Shareholder Centre / Annual General Meeting section of the company's website.

The business to be transacted at the meeting will include:

- To receive the company's annual accounts for the year ended 31st March 2012 together with the Report of the Directors and the auditor's report on those accounts
- To receive and approve the directors' remuneration report for the year ended 31st March 2012 and the auditor's report on the auditable part of the directors' remuneration report
- To declare a final dividend per ordinary share in respect of the year ended 31st March 2012
- To declare a special dividend per ordinary share and to effect a share consolidation
- To re-elect all directors retiring at the meeting who are seeking reappointment

- To reappoint KPMG Audit Plc as auditor of the company and to authorise the directors to determine its remuneration
- To authorise the company (and all companies which are subsidiaries of the company) in aggregate to make political donations to political parties or independent election candidates, to make political donations to political organisations other than political parties and to incur political expenditure, provided that the combined aggregate amount of donations made and expenditure incurred does not exceed £50,000
- To authorise the directors to exercise all the powers of the company to allot shares in the company and to grant rights to subscribe for, or to convert any security into, shares in the company up to certain limits
- To empower the directors to dis-apply pre-emption rights when allotting equity securities for cash, subject to certain limits
- To authorise the company to make market purchases of its own ordinary shares, subject to certain limits and conditions
- To permit a general meeting of the company, other than an annual general meeting, to be called on not less than 14 clear days' notice.

A member entitled to attend and vote at the meeting is entitled to appoint a proxy to exercise all or any of his or her rights to attend and to speak and vote on his or her behalf at the meeting. A member may appoint more than one proxy in relation to the meeting provided that each proxy is appointed to exercise the rights attached to a different share or shares held by that member. A proxy need not be a member of the company.

### Dividends

The interim dividend of 15.0 pence per share (2011 12.5 pence) was paid in February 2012.

The directors recommend a final dividend of 40.0 pence per share in respect of the year ended 31st March 2012 (2011 33.5 pence), making a total for the year of 55.0 pence per share (2011 46.0 pence), payable on 17th August 2012 to shareholders on the register at the close of business on 3rd August 2012.

At the 2012 Annual General Meeting a resolution will be proposed to declare a special dividend of 100.0 pence per share and to approve a share consolidation. Full information on the proposed special dividend and share consolidation is contained in the circular to shareholders in respect of the 2012 Annual General Meeting accompanying this annual report.

Other than as referred to under 'Employee Share Schemes' on page 102, during the year ended 31st March 2012 and from that date up to the date of publication of this annual report there were no arrangements under which a shareholder has waived or agreed to waive any dividends nor any agreement by a shareholder to waive future dividends.

## Dividend Payments and DRIP

Dividends can be paid directly into shareholders' bank accounts. A Dividend Reinvestment Plan (DRIP) is also available. This allows shareholders to purchase additional shares in the company with their dividend payment. Further information and a mandate can be obtained from the company's registrars, Equiniti, whose details are set out on page 175 and on the Investor Relations section of the company's website.

## Share Capital and Control

### Capital Structure

The issued share capital of the company at 31st March 2012 was 214,675,736 ordinary shares of £1.00 each (excluding treasury shares). The company did not allot any shares during the year ended 31st March 2012.

As at 31st March 2012, the company held 5,997,877 treasury shares. There were no purchases, sales or transfers of treasury shares during the year ended 31st March 2012.

### Purchase by the Company of its Own Shares

At the 2011 Annual General Meeting, shareholders renewed the company's authority to make market purchases of up to 21,467,573 ordinary shares representing 10% of the issued share capital of the company (excluding treasury shares) as at 1st June 2011. This authority subsisted at 31st March 2012.

During the year ended 31st March 2012 and from that date up to the date of publication of this annual report, the company did not make any purchases of its own shares or propose to purchase its own shares (either through the market or by an offer made to all shareholders or otherwise), nor did the company acquire any of its own shares other than by purchase. Since 31st March 2012 the company has not effected any purchases of its own shares, entered into any options to purchase its own shares or entered into any contracts to make such purchases (including transactions made through the market or by an offer made to all shareholders or otherwise).

At the 2012 Annual General Meeting the board will again seek shareholders' approval to renew the annual authority for the company to make purchases of its own shares through the market.

### Rights and Obligations Attaching to Shares

The holders of ordinary shares in the company are entitled to receive dividends when declared, to receive the company's annual report, to attend and speak at general meetings of the company, to appoint proxies and to exercise voting rights.

As at 31st March 2012 and as at the date of publication of this annual report, except as referred to below, there are no restrictions on the transfer of ordinary shares in the company, no limitations on the holding of securities and no requirements to obtain the approval of the company, or of other holders of securities in the company, for a transfer of securities.

The directors may, in certain circumstances, refuse to register the transfer of a share in certificated form which is not fully paid up, where the instrument of transfer does not comply with the requirements of the company's Articles of Association, or if entitled to do so under the Uncertificated Securities Regulations 2001. The directors may also refuse to register a transfer of ordinary shares in certificated form, which represent 0.25% or more of the issued share capital of the company, following the failure by the member or any other person appearing to be interested in the shares to provide the company with information requested under section 793 of the Companies Act 2006 (the 2006 Act).

No person holds securities in the company carrying any special rights with regard to control of the company. There are no restrictions on voting rights (including any limitations on voting rights of holders of a given percentage or number of votes or deadlines for exercising voting rights) except that a shareholder has no right to vote in respect of a share unless all sums due in respect of that share are fully paid. There are no arrangements by which, with the company's cooperation, financial rights carried by shares in the company are held by a person other than the holder of the shares. As at 31st March 2012 and as at the date of publication of this annual report, there are no agreements known to the company between holders of securities that may result in restrictions on the transfer of securities or on voting rights.

### Nominees and Liens

During the year ended 31st March 2012 and from that date up to the date of publication of this annual report:

- No shares in the company were acquired by the company's nominee, or by a person with financial assistance from the company, where the company has a beneficial interest in the shares (and there was no person who acquired shares in the company in a previous financial year in its capacity as the company's nominee or with financial assistance from the company); and
- The company did not obtain or hold a lien or other charge over its own shares.

### Allotment of Securities for Cash and Placing of Equity Securities

During the year ended 31st March 2012 and from that date up to the date of publication of this annual report, the company has not allotted, nor has any major subsidiary undertaking of the company allotted, equity securities for cash (other than pursuant to an open offer, a rights issue or any issue specifically authorised by shareholders or otherwise). During the year ended 31st March 2012 and from that date up to the date of publication of this annual report the company has not participated in any placing of equity securities.

### Listing of the Company's Shares

The company's shares have Premium Listing on the London Stock Exchange and trade as part of the FTSE 100 index under the symbol JMAT.

### American Depositary Receipt Programme

The company has a sponsored Level 1 American Depositary Receipt (ADR) programme which BNY Mellon administers and for which it acts as Depositary. Each ADR represents two ordinary shares of the company. The ADRs trade on the US over-the-counter market under the symbol JMPY. When dividends are paid to shareholders, the Depositary converts such dividends into US dollars, net of fees and expenses, and distributes the net amount to ADR holders. Contact details for BNY Mellon are set out on page 175.

## Other Statutory Information continued

### Employee Share Schemes

At 31st March 2012, 4,485 current and former employees, representing approximately 45% of employees worldwide, were shareholders in the company through the group's employee share schemes. Through these schemes, current and former employees held 3,803,914 ordinary shares (1.77% of issued share capital, excluding treasury shares). As at 31st March 2012, 282 current and former employees held options over 758,867 ordinary shares through the company's executive share option schemes. Also as at 31st March 2012, 2,676,241 ordinary shares had been allocated but had not yet vested under the company's long term incentive plan to 1,007 current and former employees.

Shares acquired by employees through the company's employee share schemes rank equally with the other shares in issue and have no special rights. Voting rights in respect of shares held through the company's employee share schemes are not exercisable directly by employees. However, employees can direct the trustee of the schemes to exercise voting rights on their behalf. The trustees of the company's employee share ownership trust (ESOT) have waived their rights to dividends on shares held by the ESOT which have not yet vested unconditionally in employees.

### Interests in Voting Rights

The UK Financial Services Authority's (FSA) Disclosure and Transparency Rules (DTRs)

set out certain notification requirements in respect of voting rights in listed companies. In summary, a person must notify the issuer of securities of the percentage of its voting rights he or she holds as shareholder (or holds or is deemed to hold through his or her direct or indirect holding of certain financial instruments) if, as a result of an acquisition or disposal of shares in the company or financial instruments, the percentage of those voting rights reaches, exceeds or falls below certain thresholds. In respect of the company, the threshold is 3% (and each 1% threshold above 3%, up to 100%).

Information provided to the company pursuant to the FSA's DTRs is published on a Regulatory Information Service and on the Media / News / Regulatory News section of the company's website.

The following information had been disclosed to the company under the FSA's DTRs in respect of notifiable interests in the voting rights in the company's issued share capital exceeding the 3% notification threshold:

	Nature of holding <sup>(1)</sup>	Total voting rights	% of total voting rights <sup>(2)</sup>
As at 31st March 2012:			
BlackRock, Inc.	Indirect	21,440,270	9.99%
	Financial Instrument (CFD)	25,683	0.01%
Ameriprise Financial, Inc.	Direct	264,202	0.12%
	Indirect	10,512,731	4.89%
Lloyds Banking Group plc	Indirect	10,731,602	4.99%
FIL Limited	Indirect	10,516,934	4.89%
	Financial Instrument (CFD)	43,890	0.02%
Legal & General Group Plc	Direct	8,581,762	3.99%
From 31st March 2012 to 31st May 2012:			
BlackRock, Inc.	Indirect	21,262,792	9.90%
	Financial Instrument (CFD)	269,490	0.13%

(1) A person has an 'Indirect' holding of securities if they are held on its behalf or it is able to secure that rights carried by them are exercised in accordance with its instructions.

(2) Total voting rights attaching to the issued ordinary share capital of the company (excluding treasury shares) at the date of disclosure as notified to the company.

Other than as stated above, as far as the company is aware, there is no person with a significant direct or indirect holding of securities in the company.

### Contracts with Controlling Shareholders

There were no contracts of significance (as defined in the FSA's Listing Rules) subsisting during the year ended 31st March 2012 or from that date up to the date of publication of this annual report between any group undertaking and a controlling shareholder. There were no contracts for the provision of services to any group undertaking by a controlling shareholder subsisting during the year ended 31st March 2012 or from that date up to the date of publication of this annual report.

### Directors

The following served as directors during the year ended 31st March 2012:

- Tim Stevenson
- Sir John Banham (retired 19th July 2011)
- Neil Carson
- Alan Ferguson
- Sir Thomas Harris
- Robert MacLeod
- Larry Pentz
- Michael Roney
- Bill Sandford
- Dorothy Thompson
- Alan Thomson (retired 19th July 2011)
- Robert Walvis (retired 19th July 2011).

The biographical details of all the directors serving at 31st March 2012, including details of their relevant experience and other significant commitments, are shown on page 83.

As announced on 22nd May 2012, Sir Thomas Harris will be retiring from the board at the close of the 2012 Annual General Meeting on 25th July 2012.

## Appointment and Replacement of Directors

The rules about the appointment and replacement of directors are contained in the company's Articles of Association. The Articles of Association provide that the number of directors is not subject to any maximum but must not be less than six, unless otherwise determined by the company by ordinary resolution. Directors may be appointed by an ordinary resolution of the members or by a resolution of the directors.

Under the Articles of Association, a director appointed by the directors must retire at the next following annual general meeting and is not taken into account in determining the directors who are to retire by rotation at the meeting. Also under the company's Articles of Association, at least one third of the board must retire by rotation at each annual general meeting. Notwithstanding these provisions, the board has agreed that all directors will seek re-election at each annual general meeting in accordance with the Code. Accordingly, all directors (other than Sir Thomas Harris) will be offering themselves for re-election at the 2012 Annual General Meeting.

A director may be removed by a special resolution of the company. In addition, a director must automatically cease to be a director if (i) he or she ceases to be a director by virtue of any provision of the 2006 Act or he or she becomes prohibited by law from being a director, or (ii) he or she becomes bankrupt or makes any arrangement or composition with his or her creditors generally, or (iii) he or she is suffering from a mental disorder, or (iv) he or she resigns from his or her office by notice in writing to the company or, in the case of an executive director, the appointment is terminated or expires and the directors resolve that his or her office be vacated, or (v) he or she is absent for more than six consecutive months without permission of the directors from meetings of the directors and the directors resolve that his or her office be vacated, or (vi) he or she is requested in writing, or by electronic form, by all the other directors to resign.

## The Company's Articles of Association

The company's Articles of Association are available on the Investor Relations / Corporate Governance section of the company's website. The company's Articles of Association may only be amended by a special resolution at a general meeting of the company.

## Powers of the Directors

The powers of the directors are determined by the company's Articles of Association, UK legislation including the 2006 Act and any directions given by the company in general meeting.

The directors have been authorised by the company's Articles of Association to issue and allot ordinary shares and to make market purchases of its own shares. These powers are referred to shareholders for renewal at each annual general meeting. Any shares so purchased by the company may be cancelled or held as treasury shares. Further information is set out under 'Purchase by the Company of its Own Shares' on page 101.

## The Interests of Directors in the Company's Shares

The interests of persons who were directors of the company at 31st March 2012, and their connected persons, in the issued shares of the company (or in derivatives or other financial instruments relating to such shares) as at that date notified or notifiable to the company under the FSA's DTRs are given in the Remuneration Report on pages 116 and 117. The Remuneration Report also sets out details of any changes in those interests between 31st March 2012 and 31st May 2012.

## Directors' Interests in Contracts

Other than service contracts, no director had any interest in any material contract with any group company at any time during the year ended 31st March 2012 or from that date up to the date of publication of this annual report. There were no contracts of significance (as defined in the FSA's Listing Rules) subsisting during the year ended 31st March 2012 or from that date up to the date of publication of this annual report to which any group undertaking was a party and in which a director of the company is or was materially interested.

## Change of Control

During the year ended 31st March 2012 and from that date up to the date of publication of this annual report there were no significant agreements to which the company or any subsidiary was or is a party that take effect, alter or terminate on a change of control of the company following a takeover bid.

However, the company and its subsidiaries were, during this period, and are, as at the date of publication of this annual report, party to a number of commercial agreements that may allow the counterparties to alter or terminate the agreements on a change of control of the company following a takeover bid.

Other than the matters referred to below, these are not deemed by the company to be significant in terms of their potential effect on the group as a whole.

The group has a number of loan notes and borrowing facilities which may require prepayment of principal and payment of accrued interest and breakage costs if there is change of control of the company. The group has also entered into a series of financial instruments to hedge its currency, interest rate and metal price exposures which provide for termination or alteration if a change of control of the company materially weakens the creditworthiness of the group.

The company is party to a marketing agreement with a subsidiary of Anglo American Platinum Limited, originally entered into in 1992, under which the company was appointed as sales and marketing agent for refined platinum group metals worldwide excluding the US and the company agreed to provide certain marketing services. The agreement contains provisions under which the counterparty may have the right to terminate the agreement on a change of control of the company.

The executive directors' service contracts each contain a provision to the effect that if the contract is terminated by the company within one year after a change of control of the company, the company will pay to the director as liquidated damages an amount equivalent to one year's gross basic salary and other contractual benefits less the period of any notice given by the company to the director.

The rules of the company's employee share schemes set out the consequences of a change of control of the company on participants' rights under the schemes. Generally such rights will vest and become exercisable on a change of control subject to the satisfaction of relevant performance conditions.

During the year ended 31st March 2012 and from that date up to the date of publication of this annual report there were no other agreements between the company or any subsidiary and its or their directors or employees providing for compensation for loss of office or employment (whether through resignation, purported redundancy or otherwise) that occurs because of a takeover bid.

## Other Statutory Information continued

### Disabled Persons

A description of the company's policy applied during the year ended 31st March 2012 and from that date up to the date of publication of this annual report relating to the recruitment, employment and training of disabled employees can be found on page 81.

### Employee Involvement

A description of the action taken by the company during the year ended 31st March 2012 and from that date up to the date of publication of this annual report relating to employee involvement can be found on pages 48 to 59.

### Use of Financial Instruments

Information on the group's financial risk management objectives and policies and its exposure to credit risk, liquidity risk, interest rate risk and foreign currency risk can be found on pages 155 to 160.

### Branches

The company and its subsidiaries have established branches in a number of different countries in which they operate.

### Policy on Payment of Commercial Debts

The group's policy in relation to the payment of all suppliers and persons who may become suppliers is set out in its Group Control Manual, which is distributed to all group operations. The group's policy is that payment should be made within the credit terms agreed with the supplier, subject to the supplier having performed its obligations under the relevant contract. It is not the group's policy to follow any other specific code or standard on payment practice in respect of its suppliers.

At 31st March 2012, the company's aggregate level of 'creditor days' amounted to 5 days. Creditor days are calculated by dividing the aggregate of the amounts which were outstanding as trade payables at 31st March 2012 by the aggregate of the amounts the company was invoiced by suppliers during the year ended 31st March 2012 and multiplying by 365 to express the ratio as a number of days.

### Charitable Donations

During the year ended 31st March 2012 the group donated £645,000 (2011 £517,000) to charitable organisations worldwide, of which £378,000 (2011 £320,000) was in the UK. Further information on donations made by the group worldwide are given on page 58.

### Political Donations and Expenditure

It is the policy of the group not to make political donations or incur political expenditure.

Under applicable UK legislation (the 2006 Act), political donations by the company to any political parties, other political organisations or independent election candidates or the incurring by the company of political expenditure are prohibited unless authorised by shareholders in advance. Under the legislation, the terms political donation, political party, political organisation and political expenditure are capable of wide interpretation. Sponsorship, subscriptions, payment of expenses, paid leave for employees fulfilling public duties and support for bodies representing the business community in policy review or reform may fall within these definitions.

During the year ended 31st March 2012:

- No political donations were made by the company or its subsidiaries to any EU political party, to any other EU political organisation or to any EU independent election candidate (2011 £ nil);
- No EU political expenditure was incurred by the company or its subsidiaries (2011 £ nil); and
- No contributions were made by the company or any subsidiary to any non-EU political party within the meaning of the 2006 Act (2011 £ nil).

The term 'EU' as used above applies to parties, organisations and independent election candidates that seek public office in any EU Member State and to expenditure incurred in their support or in relation to any referendum held under the laws of an EU Member State. 'Non-EU political party' means any political party which carries on, or proposes to carry on, its activities wholly outside EU Member States.

The company has no intention either now or in the future of making any political donation or incurring any political expenditure in respect of any political party, political organisation or independent election candidate. However, to avoid inadvertently contravening the 2006 Act, the board is proposing at the 2012 Annual General Meeting to renew the authority, first granted by shareholders at the annual general meeting in 2004, and renewed at each subsequent annual general meeting, for the company to make political donations and to incur political expenditure. The proposed

authority will be subject to an overall aggregate limit on donations and expenditure of £50,000. As permitted under the 2006 Act, the resolution will extend to political donations made, or political expenditure incurred, by any subsidiaries of the company.

### Financial Assistance Received from Government

The group received no financial assistance from government during the year.

### Auditors and Disclosure of Information

In accordance with section 489 of the 2006 Act, resolutions are to be proposed at the 2012 Annual General Meeting for the reappointment of KPMG Audit Plc as auditor of the company and to authorise the directors to determine its remuneration.

So far as each person serving as a director of the company at the date this Report of the Directors was approved by the board is aware, there is no relevant audit information (that is information needed by the auditor in connection with preparing its report) of which the company's auditor is unaware. Each such director hereby confirms that he or she has taken all the steps that he or she ought to have taken as a director in order to make himself or herself aware of any relevant audit information and to establish that the company's auditor is aware of that information.

### Management Report

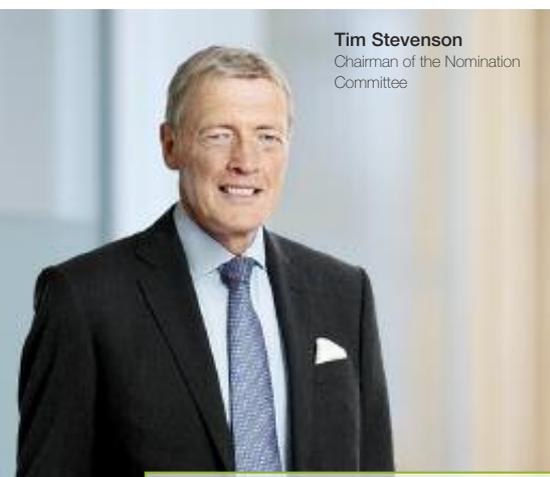
The Report of the Directors is the "management report" for the purposes of the Financial Services Authority's Disclosure and Transparency Rules (DTR 4.1.8R).

The Report of the Directors was approved by the board on 6th June 2012 and is signed on its behalf by:



**Simon Farrar**  
Company Secretary

# Nomination Committee Report



**Tim Stevenson**  
Chairman of the Nomination  
Committee

**“I am pleased to present the Report of the Nomination Committee for 2012.”**

## Role

The terms of reference of the Nomination Committee are summarised on page 89. The terms of reference can be found in the Investor Relations / Corporate Governance section of the company's website or may be obtained from the Company Secretary.

## Composition

The Nomination Committee comprises all the independent non-executive directors together with the group Chairman. The quorum necessary for the transaction of business is two, each of whom must be an independent non-executive director. Biographical details of the independent non-executive directors and the group Chairman are set out on page 83. Their remuneration is set out on page 114.

The group Chairman acts as the Chairman of the Nomination Committee, although he does not chair the Committee when it is dealing with the matter of succession to the chairmanship of the company. A non-executive director may not chair the Committee when it is dealing with a matter relating to that non-executive director.

Only members of the Committee have the right to attend committee meetings. However, the Chief Executive, the Group Director, Human Resources and Environment, Health and Safety, external advisers and others may be invited to attend for all or part of any meeting as and when appropriate.

The Company Secretary is secretary to the Nomination Committee.

The Committee has the authority to seek any information that it requires from any officer or employee of the company or its subsidiaries. In connection with its duties, the Committee is also authorised by the board to take such independent advice (including legal or other professional advice, at the company's expense) as it considers necessary. This includes requesting information from, or commissioning investigations by, external advisers.

## Meeting Frequency

Meetings are held on an ad hoc basis, usually immediately after a board meeting, but on such other occasions as may be needed.

## Main Activities in the Year

The Nomination Committee met twice during the year ended 31st March 2012, on the following dates, and it conducted the following business:

Meeting date	Main activities
10th May 2011	<ul style="list-style-type: none"> <li>Agreed to recommend to the board the appointment of Michael Roney as Senior Independent Director and as Chairman of the Management Development and Remuneration Committee (MDRC) with effect from the close of the annual general meeting in July 2011 following the retirements of Alan Thomson and Robert Walvis respectively</li> </ul>
29th March 2012	<ul style="list-style-type: none"> <li>Reviewed board size, structure and composition. The Chairman reported that Sir Thomas Harris would be retiring from the board at the close of the 2012 Annual General Meeting</li> <li>Considered the process for the search for a new non-executive director, including the appointment of external search consultants</li> <li>Discussed the selection criteria for the proposed appointment of a new non-executive director</li> </ul>

Since 31st March 2012, the Nomination Committee met once, on the following date, and it conducted the following business:

Meeting date	Main activities
31st May 2012	<ul style="list-style-type: none"> <li>Reviewed progress in respect of the search for a new non-executive director, including the appointment of external search consultants</li> </ul>

## Boardroom Diversity

The search for board candidates is conducted, and appointments made, on merit, against objective selection criteria having due regard, amongst other things, to the benefits of diversity on the board, including gender. Diversity is considered by the Nomination Committee on behalf of the board in considering board composition and in its process for making board appointments,

including in setting selection criteria. This is referred to further in the board's statement on board diversity dated 28th November 2011 which is published in the Investor Relations / Corporate Governance section of the company's website and is set out on page 92.

In respect of the proposed recruitment of a new non-executive director, at its meeting on 29th March 2012 the Committee

considered a specification which set out certain essential characteristics for the role, while stating the desirability of diversity.

On behalf of the Nomination Committee:

**Tim Stevenson**  
Chairman of the Nomination Committee

# Audit Committee Report

**Alan Ferguson**  
Chairman of the Audit  
Committee

**“I am pleased to present the Report of the Audit Committee for 2012.”**

## Role

The terms of reference of the Audit Committee, which were updated during the financial year, are summarised on pages 89 and 90. The terms of reference can be found in the Investor Relations / Corporate Governance section of the company's website or may be obtained from the Company Secretary.

## Composition

The Audit Committee comprises all the independent non-executive directors. Biographical details of the independent non-executive directors are set out on page 83. Their remuneration is set out on page 114.

Alan Ferguson replaced Alan Thomson as Chairman of the Audit Committee in July 2011 on his retirement from the board. Details of Alan Ferguson's previous roles, experience and qualifications are set out on page 83.

The group Chairman, the Chief Executive, the Group Finance Director, the Head of Internal Audit and Risk and the external auditor attend Audit Committee meetings by invitation. The Committee also meets separately with the Head of Internal Audit and Risk and with the external auditor without management being present.

The Company Secretary is secretary to the Audit Committee.

## Main Activities in the Year

The Audit Committee met four times during the year ended 31st March 2012, on the following dates, and it conducted the following business:

Meeting date	Main activities
26th May 2011	<ul style="list-style-type: none"> <li>Reviewed the group's preliminary announcement, draft report and accounts for the financial year</li> <li>Reviewed papers on key accounting judgments, on credit control and credit risk and on litigation affecting the group</li> <li>Considered reports from the external auditor on its audit and its review of the accounts including accounting policies and areas of judgment, and its comments on risk management and control matters</li> <li>Met with both internal audit and the external auditor without management being present</li> </ul>
18th July 2011	<ul style="list-style-type: none"> <li>Reviewed the group's interim management statement for the first quarter of the financial year</li> <li>Considered reports on internal controls from the internal auditors</li> <li>Reviewed the proposed external audit fees and audit scope for the financial year</li> <li>Assessed the performance of the external auditor. The review of the external auditor was used to confirm the appropriateness of its reappointment and included assessment of its independence, qualification, expertise and resources, and effectiveness of the audit process</li> <li>Recommended to the board the reappointment of KPMG Audit Plc as auditor</li> <li>Considered reports on IT strategy and risks from the Group Director, Information Technology</li> </ul>
21st November 2011	<ul style="list-style-type: none"> <li>Reviewed the group's half year results and announcement and the external auditor's review</li> <li>Reviewed papers on key accounting judgments, on credit control and credit risk and on litigation affecting the group</li> <li>Considered reports on the group's treasury activities from the Group Treasurer</li> <li>Considered reports on internal controls from the internal auditors and group security</li> <li>Recommended to the board the approval of revised terms of reference for the Committee</li> <li>Assessed the performance of the internal auditors</li> </ul>

## Main Activities in the Year (continued)

Meeting date	Main activities
31st January 2012	<ul style="list-style-type: none"> <li>Reviewed the group's interim management statement for the third quarter of the financial year</li> <li>Reviewed the group's risk register, reports on controls from the internal auditors and group security and reports from management on the effectiveness of the group's systems for internal financial control and risk management</li> <li>Considered internal audit and security resource requirements and approved the internal audit and group security plans for 2012/13</li> <li>Reviewed metal trading limits and controls</li> <li>Received an update from the external auditor on accounting, reporting and governance developments</li> <li>Reviewed non-audit services provided by the external auditor during the financial year to date and the associated authorisation policy</li> <li>Reviewed the group's whistleblowing procedures and the matters raised during the year</li> <li>Approved changes to the Group Control Manual, including changes to the group authority levels</li> <li>Received and considered a presentation on the risks facing the Process Technologies business from its finance director</li> </ul>

Since 31st March 2012, the Audit Committee has met once, on the following date, and it conducted the following business:

Meeting date	Main activities
31st May 2012	<ul style="list-style-type: none"> <li>Reviewed the group's preliminary announcement, draft report and accounts for the financial year and the group's assessment of going concern</li> <li>Considered the reappointment of the external auditor for the following year</li> <li>Considered reports on internal controls from the internal auditors and group security</li> <li>Met with both internal audit and the external auditor without management being present</li> </ul>

## Independence of External Auditor

Both the board and the external auditor have for many years had safeguards in place to avoid the possibility that the auditor's objectivity and independence could be compromised. The issue of auditor independence is taken very seriously and is reviewed annually. This year some changes have been made to the senior audit team. A second partner has been introduced partly to provide greater senior level coverage but also to provide some continuity when the signing partner rotates in 2013.

Our policy in respect of services provided by the external auditor is as follows:

- Audit related services – the external auditor is invited to provide services which, in its position as auditor, it must or is best placed to undertake. This includes formalities relating to borrowings, shareholder and other circulars, various other regulatory reports and work in respect of acquisitions and disposals
- Tax compliance and advice – the auditor may provide such services where it is best suited, but otherwise such work is put out to tender

- Other services – these may not be provided where precluded by ethical standards or where we believe it would compromise audit independence and objectivity.

To the extent consistent with the above policy, services likely to cost less than £25,000 may be approved by the Group Finance Director. Services above this amount must be approved by the Chairman of the Audit Committee, unless they are likely to be in excess of £100,000, when they must be approved by the Audit Committee.

The split between audit and non-audit fees for the year ended 31st March 2012 and information on the nature of non-audit fees appear in note 5 on the accounts.

## Internal Audit

Internal audit independently reviews the risks and control processes operated by management. It carries out independent audits in accordance with an internal audit plan which is agreed with the Audit Committee before the start of the financial year. As part of this process the Committee looks at the resources devoted to the function to ensure they are adequate to deliver the plan.

The plan provides a high degree of financial and geographical coverage and devotes significant effort to the review of the risk management framework surrounding the major business risks.

Internal audit reports include recommendations to improve internal controls together with agreed management action plans to resolve the issues raised. Internal audit follows up the implementation of recommendations and reports progress to senior management and the Audit Committee.

The Audit Committee reviews the findings of the internal audits completed during the year.

The effectiveness of the internal audit function is reviewed and discussed on an annual basis.

On behalf of the Audit Committee:



**Alan Ferguson**  
Chairman of the Audit Committee

# Remuneration Report

Remuneration Report to Shareholders for the  
year ended 31st March 2012



**Michael Roney**  
Chairman of the Management  
Development and  
Remuneration Committee

## → Contents

- 108 Introduction to the Remuneration Report
- 108 Terms of Reference and Constitution of the Management Development and Remuneration Committee (MDRC)
- 109 Activities of the MDRC
- 109 Johnson Matthey – Executive Remuneration Policy
- 110 Executive Remuneration Practices and Rules 2011/12
- 112 Outcomes – Actual Remuneration for 2011/12
- 115 Other Historical and Statutory Information

### Introduction to the Remuneration Report

The overriding responsibility of a remuneration committee is to create the remuneration policies and practices that achieve the best value for shareholders. Pay and incentives have to be set at the right level to attract and retain good management and to fully incentivise outstanding management performance, but at levels that are in line with the sector in general, and that provide a fair return to shareholders.

This year, we recognise that the remuneration of senior executives is under more scrutiny than ever before and we are mindful of the principles of remuneration published by stakeholder representatives such as the Association of British Insurers (ABI) and of the potential revisions to governance outlined by the Department of Business, Innovation and Skills. This report seeks to be open and transparent in reporting on remuneration and on the basis for remuneration, both historically and going forward.

The remuneration committee is also charged with ensuring that the long term interests of the company and shareholders are taken fully into account, both in remuneration structure and in ensuring that good processes exist for management development and succession planning. This is particularly important in a high technology company where R&D investment is required many years before those ideas come to commercial fruition. Therefore we aim to build remuneration policies and structures that reward performance over the long term and that encourage directors and employees to develop long term careers with the company.

I believe that the consistent results over the last decade, the consistency and success of a largely internally developed management team and the very strong year we have experienced in 2011/12 indicate that we have good policies and practices in place. However, we will continue to review all aspects of remuneration, management development and succession planning to ensure that shareholders' interests continue to be fully represented.

Michael Roney

### Terms of Reference and Constitution of the Management Development and Remuneration Committee (MDRC)

The Management Development and Remuneration Committee is a committee of the board and comprises all the independent non-executive directors of the company as set out on page 83 and the group Chairman. The Chairman of the Committee was Robert Walvis until his retirement on 19th July 2011, after which Michael Roney took over the role.

The Committee's terms of reference include determination on behalf of the board of fair remuneration for the Chief Executive, the other executive directors and the group Chairman (in which case the group Chairman does not participate).

Non-executive directors' remuneration is determined by the board, within the limits prescribed by the company's Articles of Association. The remuneration consists of fees, which are set following advice taken from independent consultants and are reviewed at regular intervals.

In addition, the Committee assists the board in ensuring that the company has well developed plans for management succession, including the recruitment and development of senior management, along with appropriate remuneration policies to ensure that management are retained and motivated.

The Group Director, Human Resources and Environment, Health and Safety (HR and EHS) acts as secretary to the Committee. The full terms of reference of the Committee are available on the company's website at [www.matthey.com](http://www.matthey.com) in the Investor Relations / Corporate Governance section.

## Activities of the MDRC

The Committee meets at least three times per year. The principal activities are set out in the terms of reference and the timetable for specific reviews and approval processes is set out below. In 2011/12 the committee met on four occasions.

### Table of Remuneration Committee Activities

Meeting	Annual agenda items	Other agenda items
<b>May</b>	Review of CEC and senior managers' salary increases Review of executive directors' salary and bonus Review of pay within the group Approval of the Remuneration Report	
<b>May or July</b>	Approval of executive directors' salary and bonus Approval of LTIP allocation Approval of LTIP vesting Review of other senior managers' salary increases and bonus payments	Chairman's fees (every three years)
<b>November</b>	Management development and succession planning Review of the share incentive plan Update on remuneration issues Review of remuneration policy	
<b>March</b>	Approval of bonus scheme rules Review of the share incentive plan	Major review of structure of executive remuneration (every three years)

## Johnson Matthey – Executive Remuneration Policy

### Key Goals of Policy and Balance Between Fixed and Variable Remuneration

The key goal of the remuneration policy remains to obtain the best value for shareholders. This requires that the pay and benefits structure is competitive within the sector, whilst simultaneously providing stretching targets that require significant outperformance to maximise incentive payments.

Basic salaries are the primary element of remuneration and the general policy is to set basic salaries at the level required to retain and motivate, taking into account individual performance, the complexity and scale of the director's duties, length of time in post and taking due cognisance of market levels in the appropriate sector. The Committee recognises that there is a competitive market for successful executives and therefore benchmark data are regarded as relevant background information. However, it is not the policy of the Committee to set salaries directly in line with that data, or in line with benchmarks mathematically derived from that data.

With regard to variable pay, the Committee believes that the provision of appropriate rewards for superior performance is vital to the continued growth of the business.

Further incentives in variable pay are therefore to be structured in a way that provides the incentives for effective short and long term management and creates the opportunity for enhanced remuneration but only for outstanding performance.

The details of the structures devised for short term bonuses and long term incentives are described in the subsequent section of this Remuneration Report.

The Committee further considers the balance between fixed elements of remuneration, such as basic salaries, and the performance related aspects of the remuneration package and seeks to ensure that any earnings beyond basic salaries are fully reflected in increased shareholder value through higher profit and earnings per share.

It is also an element of the policy that executive directors are encouraged to build up over time, and hold, a shareholding in the company equal to at least their basic salary with a view to ensuring that their interests remain fully aligned with those of the shareholders. Details of directors' shareholdings are set out on page 116.

### Global Pay and Employment Policies Across the Group

The remuneration policy of the group remains consistent in all countries and at all levels of the company with the overriding consideration being to pay competitive salaries in line with the appropriate country and sector and to provide opportunities to increase earnings to higher levels through superior performance. Almost all Johnson Matthey employees are able to earn bonuses based on business performance and around 900 employees are able to earn bonuses based on individual, team and business performance. Around 900 employees globally are eligible to participate in the Johnson Matthey Long Term Incentive Plan (LTIP).

### Executive Pay in the Context of General Earnings Across the Group

In setting executive directors' basic salaries, annual bonus awards and LTIP allocations, the Committee is made aware of comparative data relating to the pay and benefits of other group employees. International data provided by the Hay Group is also utilised in considering and determining local settlements.

### Policy with Regard to Remuneration Advisers

In determining the remuneration structure, the Committee appoints and receives advice from independent remuneration consultants on the pay and incentive arrangements prevailing in comparably sized industrial companies in each country in which Johnson Matthey has operations. During the year, such advice was received from the Hay Group, which also provided advice on job evaluation, and PricewaterhouseCoopers LLP. PricewaterhouseCoopers LLP also provided expatriate tax advice and other tax advice, tax audit work, completion of overseas tax returns, advice on set up of new overseas operations, some overseas payroll services and a review of some financial controls.

A statement regarding the use of remuneration consultants for the year ended 31st March 2012 is available on the company's website at [www.matthey.com](http://www.matthey.com) in the Investor Relations / Corporate Governance section.

# Remuneration Report continued

The Committee also receives recommendations from the Chief Executive on the remuneration of those reporting to him as well as advice from the Group Director, HR and EHS.

This is the general remuneration policy of the Committee and the details of the exact remuneration structure are given in the subsequent section of this report.

## Executive Remuneration Practices and Rules 2011/12

In 2010/11 a full review of remuneration was carried out, followed by a shareholder consultation in early 2011. The new practices and rules were described in last year's annual report and are now used in the calculation of variable pay and bonuses for the executive directors.

### Remuneration Basis with Effect from 1st April 2011: the Rules as they Stand

Executive directors' remuneration consists of three principal elements: these being basic pay, annual bonus and a long term incentive plan. The details of these are set out below. Information on pension arrangements for the executive directors is also included in this section.

#### Basic Salary

The general policy regarding basic salaries has been set out on page 109, indicating that there are a number of determinants in arriving at the basic salary award. These key determinants are described in more detail below.

The first determinant is the performance of the individual executive. Performance is considered against a broad set of parameters including financial, environmental, social and governance issues.

The second factor taken into account is the length of time that the executive director has been in post. For example, where promotion has taken place, the salary may initially be set at a lower level than the outgoing director. This can then give rise to higher than normal salary increases while the director gathers experience and moves towards the job norm.

The third factor is a judgment as to whether the level of basic pay remains competitive and appropriate in the relevant comparator group. For the purposes of benchmarking, the remuneration comparator used by the Committee during 2011/12 for executive directors was drawn from FTSE 100 and 250 industrial and service companies (excluding the oil and financial sectors) with market capitalisation of around £4.8 billion and with over 40% of revenue

coming from overseas. Further independent benchmark data was sourced from the Hay Group. Benchmark data are regarded as relevant background information for the Committee, but it is not its policy to set salaries directly in line with that data, or with benchmarks mathematically derived from that data. Basic salary is normally reviewed on 1st August each year.

#### LTIP

The LTIP is designed to incentivise above average performance and growth over the longer term. Shares allocated under the terms of the LTIP (which also applies to the group's 900 senior and middle managers) are released on the third anniversary of the allocation date with the release being subject to targets based on compound annual growth in the company's earnings per share (EPS). Current rules require that to achieve the maximum release of allocated shares, a compound annual growth in underlying EPS of 15% must be achieved over the three year period. The Committee strongly believes that EPS remains the best overall measure of the performance of the group across all strategic goals. The Committee has considered setting broader targets for LTIP in areas such as sustainability and new product development, but is satisfied that the full total of successful and long term focused company activities are best encapsulated in the simple and transparent measure of compound annual growth in EPS over a longer period.

Prior to 2011, the bases for share allocations were 150% of basic annual salary for the Chief Executive and 120% for executive directors. In 2011, in accordance with the review published in the 2011 annual report, share allocations of 175% of basic annual salary for the Chief Executive and 140% of annual salary for executive directors were made. These allocations remain within the LTIP rules, as approved by shareholders at the 2007 Annual General Meeting, which allow for share allocations of up to a maximum of 200% of basic annual salary each year, allowing the Committee to take account of evolution of market practice if required.

The minimum release, of 15% of the allocated shares, requires underlying EPS growth of 6% compound per annum over the three year period. For the maximum release of 100% of the allocation, underlying EPS must have grown by at least 15% compound per annum over the three year performance period. The number of allocated shares released will vary on a straight line basis between these points. There is no retesting of the performance target and so allocations will lapse if underlying EPS growth is less than 6% compound per annum over the three year performance period.

In 2009, following consultation with major shareholders, the Committee approved an adjustment to the performance targets for one year only to reflect the market conditions prevailing at the time of allocation. For the 2009 allocation only, the minimum release, of 15% of the allocation, requires underlying EPS growth of 3% compound per annum over the three year period, with no retesting of the performance target. For the maximum release of 100% of the allocation, underlying EPS must have grown by at least 10% compound per annum over the three year performance period. As a result of this adjustment, the level of award was reduced to 120% of basic annual salary for the Chief Executive and 100% for executive directors for that year. Also in 2009, there was a one-off allocation of 170% of basic salary to the then newly appointed Group Finance Director to ensure close alignment of his objectives with those of shareholders.

Although growth in underlying EPS is the primary financial measure, it is also a key objective of the company to achieve earnings growth only in the context of a good performance on return on invested capital (ROIC). Accordingly, the Committee is required to make an assessment of the group's ROIC over the performance period to ensure underlying EPS growth has been achieved with ROIC in line with the group's planned expectations. The Committee may scale back vesting to the extent that ROIC has not developed appropriately.

#### Annual Bonus

The annual bonus is complementary to the longer term LTIP award and provides a strong incentive for a short term delivery of budget in the relevant year. Whilst the LTIP target encourages business managers and the executive directors to set ambitious three year targets, the annual bonus allows the board to ensure that those plans are properly reflected in stretching but achievable annual budgets. The annual bonus is then based strictly on performance against budget, requiring that the group's budgeted underlying profit before tax (PBT) is exceeded by 10% to release the maximum payment.

The maximum bonus is set as a percentage of basic salary under the terms of the company's Executive Compensation Plan. As with the LTIP, this plan applies not only to the executive directors, but to around 200 of the group's most senior executives.

## Annual Bonus Rules

	Bonus awarded at threshold (95% of budget) (% of salary)	Bonus awarded at target (% of salary)	Bonus awarded at 110% of budget (maximum award) (% of salary)	% of awarded bonus deferred
Chief Executive	15%	75%	150%	33.3%
Other executive directors	15%	62.5%	125%	20%

### Setting the Annual Bonus Target

In order for the annual bonus to provide a strong short term performance incentive, it is key that the budgeted profitability is set at an achievable but demanding target. The board is responsible for agreeing the targeted performance and takes into account the detailed business climate for each operating division of the group. Commercial sensitivity prevents the advance publication of targets, but further information regarding historical performance is available in the following table.

### Retrospective Data on Annual Budget Targets

Year	Budgeted underlying PBT (£ million)	Actual underlying PBT (£ million)	% of budget	Chief Executive's bonus (% of salary)	Executive directors' bonus (% of salary)	Vara consensus* (£ million)	Actual underlying PBT growth
2011/12	406.0	426.0	104.9%	111.75%	93.13%	382	23%

\* The Vara consensus referred to is the published data regarding industry analysts' performance expectations for Johnson Matthey, as expressed at the start of the budget year in question. For example, the consensus for 2011/12 is that published in March 2011.

An annual bonus payment of 75% of basic salary (prevailing at 31st March) is paid to the Chief Executive and 62.5% of basic salary is paid to executive directors if the group meets the annual budget. This bonus may rise on a straight line basis to a maximum 150% of basic salary for the Chief Executive and 125% for executive directors if 110% of budgeted underlying PBT is achieved. Underlying PBT must reach 95% of budget for a minimum bonus of 15% of salary to be payable.

For the Chief Executive, 33.3% of the bonus payable is awarded as shares and deferred for a period of three years. For other executive directors, 20% of the bonus payable is awarded as shares and deferred for three years. The Committee is entitled to claw back the deferred element in cases of misstatement or misconduct or other relevant reason as determined by the Committee.

The Committee retains discretion in awarding annual bonuses and seeks to ensure that the incentive structure for senior management does not raise environmental, social and governance risks by inadvertently motivating irresponsible behaviour. The Committee is fully prepared to utilise this discretion where management has failed to properly address such risks.

### Other Benefits

The other benefits available to the executive directors are private medical insurance, a company car and membership of the group's employee share incentive plans which are open to all employees in the countries in which the group operates such plans.

### Service Contracts

The executive directors are employed on contracts subject to one year's notice at any time. On early termination of their contracts the directors would normally be entitled to 12 months' salary and benefits. The contracts of service of the executive directors and the terms and conditions of appointment of the non-executive directors are available for inspection at the company's registered office during normal business hours and at the forthcoming annual general meeting.

### Pensions – General Description of Arrangements

The company provides executive directors with membership of its UK HM Revenue & Customs registered occupational pension scheme – the Johnson Matthey Employees Pension Scheme (JMEPS). The benefits provided to executive directors through JMEPS are the same as for all other UK employees, namely a defined benefit retirement pension, dependents' and life assurance benefits plus a top-up defined contribution account. There have been no significant changes to the JMEPS rules during 2011/12.

The pension earned in respect of service up to 31st March 2010 is based on a member's final salary at the point of retirement, or earlier date of withdrawal from employment. Pension earned in respect of service from 1st April 2010 is based on the member's career average revalued earnings. Members are not required to pay contributions to receive these defined benefits. However members may pay voluntary contributions to a supplemental defined contribution account and the

company will match any contribution made up to 3% of pensionable pay each year.

Under the provisions of the Finance Act 2004 benefits from a registered pension scheme that exceed the Annual Allowance or Lifetime Allowance will be subject to a tax charge. The Annual Allowance and Lifetime Allowance were reduced to £50,000 and £1.5 million respectively with effect from 6th April 2011. On reaching these thresholds members, including executive directors, are given the option to limit their benefits in JMEPS and receive a cash supplement in lieu of the pension benefit forgone, or to continue accruing benefits in the scheme and pay the tax charge. Any tax liability due is the responsibility of the individual not the company.

Neil Carson and Bill Sandford withdrew from pensionable service on 31st March 2006 and Robert MacLeod withdrew on 31st March 2011. No pensionable service in JMEPS has been accrued by these directors since then and all have received a cash supplement of 25% of basic salary in lieu of the pension benefit forgone. The increase in accrued pension for Messrs Carson and Sandford in the table on page 115 is attributable solely to the effect of the increase in their basic salary in 2011/12 on their pension earned before 1st April 2006.

During the year Larry Pentz accrued pension in JMEPS up to the Annual Allowance and elected to cease pension accrual for the remainder of the year in return for a cash supplement of 21% of basic salary.

The supplemental payments received by all executive directors are reflected in the table on page 114.

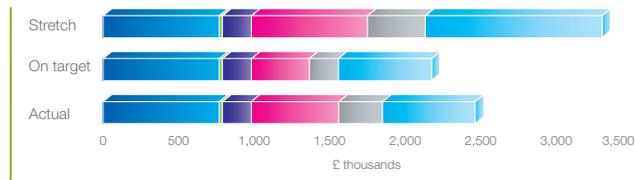
# Remuneration Report continued

## Outcomes – Actual Remuneration for 2011/12

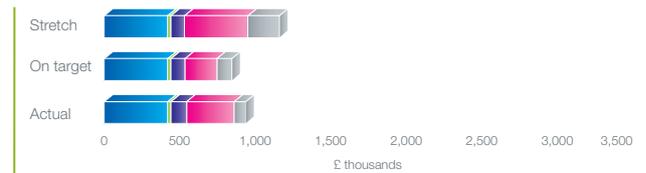
This section provides details of the actual payments and awards to directors in 2011/12. Full numerical details are provided in the tables on pages 113 to 117.

In order to fully illustrate the relationships between actual payments, on target payments and stretch (maximum) payments, graphs of the relevant data are shown below for each of the four executive directors. This does not include share option exercises from awards made in prior years. See pages 116 and 117 for further details.

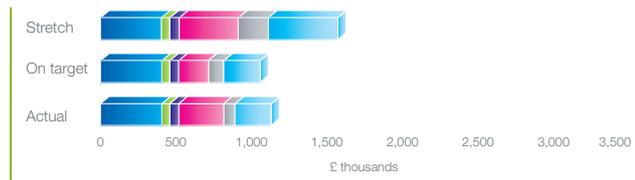
### → Neil Carson – overall remuneration



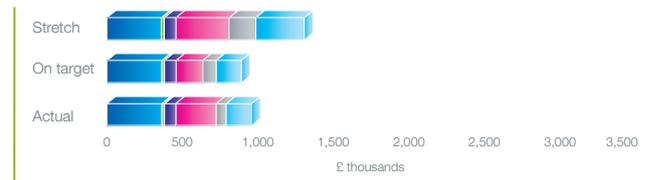
### → Robert MacLeod – overall remuneration



### → Larry Pentz – overall remuneration



### → Bill Sandford – overall remuneration



■ Basic salary ■ Benefits ■ Payment in lieu of pension ■ Bonus (cash) ■ Bonus (deferred to 2015) ■ LTIP paid out

## Basic Salary 2011/12

The changes in basic salary for each of the directors are illustrated in the table below.

Name	Basic salary at 1st August 2010 (£)	Basic salary at 1st August 2011 (£)	Increase (%)
Neil Carson	750,000	776,250	3.5
Robert MacLeod	406,600	421,000	3.5
Larry Pentz	390,000	403,650	3.5
Bill Sandford	345,000	357,100	3.5

## Comparison to Other Pay Awards in Johnson Matthey

Pay awards throughout Johnson Matthey's global operations have generally ranged between 0% and 10% in the last year, depending on local pay conditions and on local business and economic conditions. Pay awards in the UK have generally been around the 3% level with some local variations dependent on business conditions.

## LTIP Vesting in 2011/12 and Historical Information

The 2008 share allocation vested in July 2011. The performance condition was met to the extent that 52.42% of the allocated shares were released.

Details of LTIP awards, performance and vesting details are provided below.

	Year of allocation	Year of vesting	% salary awarded	Shares awarded	Compound annual growth in underlying EPS in the period	Shares released	Value at time of release (£)
<b>Neil Carson</b>							
	2007	2010	150	56,704	1.68%	0	0
	2008	2011	150	56,239	9.96%	29,480	614,233
	2009	2012	120	71,611	19.60%	71,611	Vesting July 2012
	2010	2013	150	72,393	n/a		
	2011	2014	175	69,096	n/a		
<b>Robert MacLeod</b>							
	2007	2010	n/a	0	1.68%	0	0
	2008	2011	n/a	0	9.96%	0	0
	2009	2012	170*	55,072	19.60%	55,072	Vesting July 2012
	2010	2013	120	31,397	n/a		
	2011	2014	140	29,979	n/a		
<b>Larry Pentz</b>							
	2007	2010	120	22,327	1.68%	0	0
	2008	2011	120	21,853	9.96%	11,455	238,672
	2009	2012	100	31,116	19.60%	31,116	Vesting July 2012
	2010	2013	120	30,115	n/a		
	2011	2014	140	28,744	n/a		
<b>Bill Sandford</b>							
	2007	2010	120	15,268	1.68%	0	0
	2008	2011	120	15,318	9.96%	8,029	167,289
	2009	2012	100	25,575	19.60%	25,575	Vesting July 2012
	2010	2013	120	26,640	n/a		
	2011	2014	140	25,429	n/a		

\* See page 110.

# Remuneration Report continued

## Summary Statement of Directors' Emoluments 2011/12

	Date of service agreement	Date of appointment	Basic salary £'000	Payment in lieu of pension <sup>(1)</sup> £'000	Annual cash bonus £'000	Annual deferred bonus <sup>(2)</sup> £'000	Benefits £'000	Total excluding pension £'000	Total prior year excluding pension £'000
<b>Executive</b>									
Neil Carson <sup>(3)</sup>	1.8.99	1.8.99	768	192	578	289	22	1,849	1,687
Robert MacLeod <sup>(4)</sup>	3.2.09	22.6.09	416	104	314	78	19	931	822
Larry Pentz <sup>(5)</sup>	1.1.06	1.8.03	399	57	301	75	59	891	810
Bill Sandford	21.7.09	21.7.09	353	88	266	67	17	791	774
<b>Total</b>			<b>1,936</b>	<b>441</b>	<b>1,459</b>	<b>509</b>	<b>117</b>	<b>4,462</b>	<b>4,093</b>

	Date of letter of appointment	Date of appointment	Fees £'000	Total excluding pension £'000	Total prior year excluding pension £'000
<b>Non-executive <sup>(6)</sup></b>					
Sir John Banham (Chairman) <sup>(7)</sup>	10.12.05	1.1.06	91	91	293
Alan Ferguson	10.1.11	13.1.11	57 <sup>(9)</sup>	57	11
Sir Thomas Harris	22.1.09	1.4.09	50	50	50
Michael Roney	29.3.07	1.6.07	56 <sup>(10)</sup>	56	50
Tim Stevenson (Chairman Designate) <sup>(8)</sup>	10.1.11	29.3.11	225	225	–
Dorothy Thompson	22.5.07	1.9.07	50	50	50
Alan Thomson <sup>(7)</sup>	1.8.02	24.9.02	18 <sup>(9)</sup>	18	60
Robert Walvis <sup>(7)</sup>	1.8.02	24.9.02	18 <sup>(10)</sup>	18	58
<b>Total</b>			<b>565</b>	<b>565</b>	<b>572</b>

The aggregate amount of remuneration receivable by directors and non-executive directors totalled £5,027,000 (2011 £4,665,000).

### Notes

- <sup>(1)</sup> Neil Carson, Bill Sandford and Robert MacLeod no longer accrue pensionable service in the Johnson Matthey Employees Pension Scheme. Messrs Carson and Sandford ceased to accrue with effect from 31st March 2006 and Mr MacLeod ceased to accrue with effect from 31st March 2011. They now receive an annual cash payment in lieu of pension equal to 25% of basic salary. Larry Pentz accrued pension during the year up to the Annual Allowance and received a cash supplement of 21% of basic salary thereafter. These payments are taxable under the PAYE system.
- <sup>(2)</sup> This is the element of the annual bonus which is payable as shares but is deferred for three years.
- <sup>(3)</sup> Neil Carson is a non-executive director of AMEC plc. His fees for the year in respect of this non-executive directorship were £54,375. This amount is excluded from the table above and retained by him.
- <sup>(4)</sup> Robert MacLeod is a non-executive director of Aggreko plc. His fees for the year in respect of this non-executive directorship were £61,750. This amount is excluded from the table above and retained by him.
- <sup>(5)</sup> Larry Pentz is a non-executive director of Victrex plc. His fees for the year in respect of this non-executive directorship were £48,000. This amount is excluded from the table above and retained by him.
- <sup>(6)</sup> Non-executive fees (other than for the Chairman) were reviewed on 1st April 2010 for the period from 1st April 2010 to 31st March 2013. The fees are £50,000 per annum, with the fee for chairmanship of the Audit Committee being £10,000 per annum and the Management Development and Remuneration Committee being £8,000 per annum. Sir John Banham's fees were reviewed on 1st August 2010 for the period 1st August 2010 to 19th July 2011 (the date of his retirement). The Chairman and the non-executive directors do not receive any pension benefits, LTIP allocations, share option grants or bonus payments.
- <sup>(7)</sup> Sir John Banham, Alan Thomson and Robert Walvis retired on 19th July 2011.
- <sup>(8)</sup> Tim Stevenson was Chairman Designate until Sir John Banham's retirement on 19th July 2011, after which he became Chairman.
- <sup>(9)</sup> Includes £10,000 per annum for chairmanship of the Audit Committee. Alan Ferguson was appointed Chairman of the Audit Committee on 19th July 2011. Alan Thomson previously carried out this role and retired on 19th July 2011.
- <sup>(10)</sup> Includes £8,000 per annum for chairmanship of the Management Development and Remuneration Committee. Michael Roney was appointed Chairman of the Management Development and Remuneration Committee on 19th July 2011. Robert Walvis previously carried out this role and retired on 19th July 2011.

## Pension Benefits

Disclosure of directors' pension benefits has been made under the requirements of the Financial Services Authority's Listing Rules and in accordance with the Companies Act 2006. The information below sets out the disclosures under the two sets of requirements.

	Age as at 31st March 2012	Total accrued pension as at 31st March 2011 <sup>(1)</sup> £'000 pa	Total accrued pension as at 31st March 2012 <sup>(1)</sup> £'000 pa	Change in accrued pension after allowing for inflation £'000 pa	Transfer value as at 31st March 2011 <sup>(2)</sup> £'000	Transfer value as at 31st March 2012 <sup>(2)</sup> £'000	Directors' contributions <sup>(3)</sup> £'000	Change in transfer value less directors' contributions £'000
Neil Carson	54	353	365	(6)	6,402	7,655	–	1,253
Robert MacLeod	47	9	9	–	81	106	–	25
Larry Pentz <sup>(4)</sup>	56	111	116	2	1,371	1,702	–	331
Bill Sandford	58	179	185	(3)	3,779	4,390	–	611

### Notes

- <sup>(1)</sup> The total accrued pension represents the pension which would be paid annually on normal retirement, based on pensionable service to 31st March 2012 (except in the case of Neil Carson and Bill Sandford whose pensionable service ceased on 31st March 2006 and Robert MacLeod whose pensionable service ceased on 31st March 2011). The element of the pension earned before 31st March 2010 would be subject to an actuarial reduction if retirement precedes age 60, and the element of the pension earned from 1st April 2010 will be reduced if taken before age 65.
- <sup>(2)</sup> The transfer values have been calculated in accordance with GN11 issued by the actuarial profession. For UK based pension benefits the assumptions used are the same as those in the calculation of cash equivalent transfers from JMEPS. For US based pension benefits the assumptions used are the same as those used for accounting disclosure. No allowance has been made in the transfer values for any discretionary benefits that have been or may be awarded.
- <sup>(3)</sup> Members are not required to pay contributions towards their pension benefits. Any voluntary contributions paid by executive directors are not shown except where these are matched by the company. Larry Pentz paid voluntary contributions into the supplemental defined contribution account amounting to 3% of his April 2011 salary, this contribution was matched by the company.
- <sup>(4)</sup> Larry Pentz is a US citizen but became a member of JMEPS on 1st January 2006. Prior to that he was a member of the Johnson Matthey Inc. Salaried Employees Pension Plan (a non-contributory defined benefit arrangement) and also of a US savings plan (401k). He also has benefits in a Supplemental Executive Retirement Plan (SERP). The pension values reported above are the aggregate for his separate membership of the UK and US pension schemes and the SERP. The total accrued pension as 31st March 2011 has been restated to include all of his pension benefits. US entitlements have been converted to sterling by reference to exchange rates on 31st March 2011 and 31st March 2012. Mr Pentz's US pension was fixed on 31st December 2005. The sterling equivalent of it has fluctuated over the year as a result of exchange rate movements. Of the change in the accrued benefit and the transfer value £300 and £3,020, respectively, is due to currency movements.

## Other Historical and Statutory Information

### Johnson Matthey and FTSE 100 Total Shareholder Return Rebased to 100

The following graph charts total cumulative shareholder return of the company for the five year period from 31st March 2007 to 31st March 2012 against the FTSE 100 as the most appropriate comparator group, rebased to 100 at 1st April 2007. The graph shows significant outperformance by Johnson Matthey against the FTSE 100 group over the five year period.



As at 31st March 2012, Johnson Matthey was ranked 60th by market capitalisation in the FTSE 100.

## Remuneration Report continued

### Share Options

The LTIP is now the company's single means for the provision of long term awards and from 2007 replaced the granting of share options under the Johnson Matthey 2001 Share Option Scheme (the 2001 Scheme). From 2001 to 2006 options were granted each year under the 2001 Scheme. There have been no option grants since 2006. Options were granted at the market value of the company's shares at the time of grant and were subject to performance targets over a three year period. Options may be exercised upon satisfaction of the relevant performance targets. Approximately 800 employees were granted options under the 2001 Scheme each year.

### Options granted from 2004 to 2006

Grants made in 2004, 2005 and 2006 were subject to a three year performance target of EPS growth of UK RPI plus 3% per annum. If the performance target was not met at the end of the three year performance period, the options lapsed as there was no retesting of the performance target. In addition, to reduce the cost calculated under the International Financial Reporting Standard 2 – 'Share-based Payment', gains made on the exercise of options are capped at 100% of the grant price.

The Committee had the discretion to award grants greater than 100% of basic annual salary. Grants which were made above this threshold were, however, subject to increasingly stretching performance targets. Grants between 100% and 125% of basic annual salary were subject to EPS growth of UK RPI plus 4% per annum and grants between 125% and 150% of basic

annual salary were subject to EPS growth of UK RPI plus 5% per annum. The executive directors were granted options equal to 150% of basic annual salary. All the options, other than those granted in 2006 which were subject to EPS growth of UK RPI plus 5% per annum, have met their performance targets. The 2006 options which did not meet their performance targets have lapsed.

### Options granted prior to 2004

Prior to 2004, options granted to the executive directors under the 2001 Scheme were up to a maximum of 100% of basic annual salary each year. Such options were subject to a performance target of EPS growth of UK RPI plus 4% per annum over any three consecutive years during the life of the option. The performance target was subject to annual retesting until the lapse of the options on the tenth anniversary of grant. All of these options have met their performance targets.

### Directors' Interests

The interests (in respect of which transactions are notifiable to the company under the Financial Services Authority's Disclosure and Transparency Rules) of the directors as at 31st March 2012 in the shares of the company were:

#### 1. Ordinary Shares

	31st March 2012	31st March 2011
Tim Stevenson	5,500	5,500*
Neil Carson	188,804	174,374
Alan Ferguson	1,000	1,000
Sir Thomas Harris	1,807	1,807
Robert MacLeod	3,604	3,368
Larry Pentz	25,789	25,383
Michael Roney	3,000	3,000
Bill Sandford	9,165	5,091
Dorothy Thompson	9,721	9,721

\* Shares acquired on 3rd March 2011, not disclosed in the 2011 annual report.

All of the above interests were beneficial. The executive directors are also deemed to be interested in shares held by an employee share ownership trust (see note 30 on page 162).

Directors' interests as at 31st May 2012 were unchanged from those listed above, other than that the trustees of the Johnson Matthey Share Incentive Plan have purchased on behalf of Neil Carson, Robert MacLeod, Larry Pentz and Bill Sandford a further 33 shares each.

#### 2. Share Options

As at 31st March 2012, individual holdings by the directors under the company's executive share option schemes were as set out below. Options are not granted to non-executive directors.

	Date of grant	Ordinary shares under option	Exercise price (pence)	Date from which exercisable	Expiry date	Total number of ordinary shares under option
Neil Carson	17.7.03	33,407	898	17.7.06	17.7.13	92,888 (2011 218,282)
	26.7.06	59,481	1,282	26.7.09	26.7.16	
Larry Pentz	17.7.03	17,185	898	17.7.06	17.7.13	45,950 (2011 101,530)
	26.7.06	28,765	1,282	26.7.09	26.7.16	
Bill Sandford	26.7.06	3,774	1,282	26.7.09	26.7.16	3,774 (2011 18,868)

Between 1st April 2011 and 31st March 2012 the following options were exercised by directors:

	Date of grant	Date of exercise	Options exercised	Exercise price (pence)	Market price on exercise (pence)
Neil Carson	18.7.01	3.6.11	2,770	1,083	2,038
	18.7.01	3.6.11	16,621	1,083	2,034
	20.7.05	1.2.12	77,102	1,070	2,140
	17.7.02	14.2.12	28,901	865	2,281
Larry Pentz	17.7.02	11.1.12	17,730	865	1,998
	20.7.05	1.2.12	37,850	1,070	2,140
Bill Sandford	26.7.06	1.12.11	15,094	1,282	1,874

Gains made on exercise of options by the directors during the year totalled £2,113,928 (2011 £88,138).

The closing market price of the company's shares at 30th March 2012 was 2,359 pence. The highest and lowest closing market prices during the year ended 31st March 2012 were 2,403 pence and 1,523 pence respectively.

### 3. LTIP Allocations

Number of allocated shares:

	As at 31st March 2011	Allocations during the year	Market price at date of allocation (pence)	Released during the year	Lapsed during the year	As at 31st March 2012
Neil Carson	200,243	69,096	1,966	29,480	26,759	<b>213,100</b>
Robert MacLeod	86,469	29,979	1,966	–	–	<b>116,448</b>
Larry Pentz	83,084	28,744	1,966	11,455	10,398	<b>89,975</b>
Bill Sandford	67,533	25,429	1,966	8,029	7,289	<b>77,644</b>

On 25th July 2011 shares allocated in 2008 under the LTIP were released to participants. The compound annual growth in the company's underlying EPS over the three year performance period, commencing in the year of allocation, resulted in a release of 52.42% of the allocated shares and the following gains:

	Number of shares released	Share price when released (pence)	Gain (£)
Neil Carson	29,480	2,084	614,233
Larry Pentz	11,455	2,084	238,672
Bill Sandford	8,029	2,084	167,289

The Remuneration Report was approved by the Board of Directors on 6th June 2012 and signed on its behalf by:



**Michael Roney**

Chairman of the Management Development and Remuneration Committee

The details  
behind our  
financial  
performance





- Screen printing facilities in the technology centre at Maastricht.

- Colour Technologies' products include black obscuration enamels which are printed onto car windscreens.

- Manufacturing black obscuration enamels at the Maastricht site.

# Accounts

This section includes the consolidated and parent company accounts and related notes, as well as the statement on responsibility of directors and the independent auditor's report on the financial accounts.

## Contents

- 120 Responsibility of Directors
- 121 Independent Auditor's Report
- 122 Consolidated Income Statement
- 122 Consolidated Statement of Total Comprehensive Income
- 123 Consolidated and Parent Company Balance Sheets
- 124 Consolidated and Parent Company Cash Flow Statements
- 125 Consolidated Statement of Changes in Equity
- 126 Parent Company Statement of Changes in Equity
- 127 Accounting Policies
- 131 Notes on the Accounts

## Delivering Value



### → Customer Focus at Colour Technologies

Johnson Matthey's Colour Technologies business manufactures high technology functional and decorative products for the glass and ceramics industries. Many are used by our customers in highly demanding applications, such as automotive and aerospace, and we align our research and development efforts with our customers' processes to ensure we meet their exacting performance requirements.

Expertise in precious metals, materials science and surface chemistry underpins new product development activities which are centred at the business' global technology centre, located at its headquarters in Maastricht, the Netherlands. The facility is equipped with the latest materials characterisation techniques and has a variety of lab scale process equipment, including furnaces and screen printers. This capability enables us to closely replicate our customers' manufacturing processes and allows our scientists to optimise the performance of new products under realistic plant conditions throughout the R&D process.

## Responsibility of Directors

### Statement of Directors' Responsibilities in Respect of the Annual Report and Accounts

The directors are responsible for preparing the annual report and the group and parent company accounts in accordance with applicable law and regulations.

Company law requires the directors to prepare group and parent company accounts for each financial year. Under that law they are required to prepare the group accounts in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and applicable law and have elected to prepare the parent company accounts on the same basis.

Under company law the directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the group and parent company and of their profit or loss for that period. In preparing each of the group and parent company accounts, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether they have been prepared in accordance with IFRS as adopted by the EU; and
- prepare the accounts on the going concern basis unless it is inappropriate to presume that the group and the parent company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent company's transactions and disclose with reasonable accuracy at any time the financial position of the parent company and enable them to ensure that its accounts comply with the Companies Act 2006. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations the directors are also responsible for preparing a directors' report, directors' Remuneration Report and Corporate Governance statement that comply with that law and those regulations.

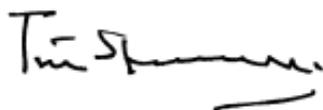
The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the UK governing the preparation and dissemination of accounts may differ from legislation in other jurisdictions.

### Responsibility Statement of the Directors in Respect of the Annual Report and Accounts

Each of the directors as at the date of the Annual Report and Accounts, whose names and functions are set out on page 83, states that to the best of his or her knowledge:

- the group and parent company accounts, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the company and the undertakings included in the consolidation taken as a whole; and
- the management report (which comprises the Report of the Directors) includes a fair review of the development and performance of the business and the position of the company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

This responsibility statement was approved by the board on 6th June 2012 and is signed on its behalf by:



**Tim Stevenson**  
Chairman

# Independent Auditor's Report

to the members of Johnson Matthey Public Limited Company

We have audited the group and parent company accounts of Johnson Matthey Plc for the year ended 31st March 2012 which comprise the Consolidated Income Statement, the Consolidated Statement of Total Comprehensive Income, the Consolidated and Parent Company Balance Sheets, the Consolidated and Parent Company Cash Flow Statements, the Consolidated Statement of Changes in Equity, the Parent Company Statement of Changes in Equity and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRS) as adopted by the EU and, as regards the parent company accounts, as applied in accordance with the provisions of the Companies Act 2006.

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

## Respective Responsibilities of Directors and Auditor

As explained more fully in the directors' responsibilities statement set out on page 120, the directors are responsible for the preparation of the accounts and for being satisfied that they give a true and fair view. Our responsibility is to audit, and express an opinion on, the accounts in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's (APB's) Ethical Standards for Auditors.

## Scope of the Audit of the Accounts

A description of the scope of an audit of accounts is provided on the APB's website at [www.frc.org.uk/apb/scope/private.cfm](http://www.frc.org.uk/apb/scope/private.cfm).

## Opinion on Accounts

In our opinion:

- the accounts give a true and fair view of the state of the group's and of the parent company's affairs as at 31st March 2012 and of the group's profit for the year then ended;
- the group accounts have been properly prepared in accordance with IFRS as adopted by the EU;
- the parent company accounts have been properly prepared in accordance with IFRS as adopted by the EU and as applied in accordance with the provisions of the Companies Act 2006; and
- the accounts have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the group accounts, Article 4 of the IAS Regulation.

## Opinion on Other Matters Prescribed by the Companies Act 2006

In our opinion:

- the part of the directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006; and
- the information given in the directors' report for the financial year for which the accounts are prepared is consistent with the accounts.

## Matters on Which we are Required to Report by Exception

We have nothing to report in respect of the following:

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company accounts and the part of the directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

Under the Listing Rules we are required to review:

- the directors' statement, set out on page 47, in relation to going concern; and
- the part of the Corporate Governance statement on page 85 relating to the company's compliance with the nine provisions of the UK Corporate Governance Code specified for our review; and
- certain elements of the report to shareholders by the board on directors' remuneration.

**D V Matthews (Senior Statutory Auditor)**  
for and on behalf of **KPMG Audit Plc, Statutory Auditor**

Chartered Accountants  
15 Canada Square, London E14 5GL

6th June 2012

## Consolidated Income Statement

for the year ended 31st March 2012

	Notes	2012 £ million	2011 restated £ million
<b>Revenue</b>		<b>12,023.2</b>	9,984.8
Cost of sales	1,2	(11,270.2)	(9,337.2)
Gross profit		<b>753.0</b>	647.6
Distribution costs		(119.8)	(112.2)
Administrative expenses		(183.1)	(169.2)
Major impairment and restructuring charges	3	–	(71.8)
Amortisation of acquired intangibles	4	(16.7)	(14.5)
<b>Operating profit</b>	1,6	<b>433.4</b>	279.9
Finance costs	7	(35.4)	(33.1)
Finance income	8	11.3	12.4
Dissolution of associate		–	0.1
<b>Profit before tax</b>		<b>409.3</b>	259.3
Income tax expense	9	(93.9)	(75.5)
<b>Profit for the year from continuing operations</b>		<b>315.4</b>	183.8
Loss for the year from discontinued operations	40	–	(1.9)
<b>Profit for the year</b>		<b>315.4</b>	181.9
<b>Attributable to:</b>			
<b>Owners of the parent company</b>		<b>315.9</b>	181.5
Non-controlling interests		(0.5)	0.4
		<b>315.4</b>	181.9
		pence	pence
<b>Earnings per ordinary share attributable to the equity holders of the parent company</b>			
Continuing operations			
Basic	11	148.7	86.1
Diluted	11	146.9	85.6
Total			
Basic	11	148.7	85.2
Diluted	11	146.9	84.7

## Consolidated Statement of Total Comprehensive Income

for the year ended 31st March 2012

	Notes	2012 £ million	2011 restated £ million
<b>Profit for the year</b>		<b>315.4</b>	181.9
<b>Other comprehensive income:</b>			
Currency translation differences	31	(53.7)	(8.9)
Cash flow hedges	31	6.1	3.7
Fair value gains on net investment hedges		23.7	2.2
Actuarial (loss) / gain on post-employment benefits assets and liabilities	14	(70.6)	85.4
Tax on above items taken directly to or transferred from equity	32	18.7	(30.0)
<b>Other comprehensive (expense) / income for the year</b>		<b>(75.8)</b>	52.4
<b>Total comprehensive income for the year</b>		<b>239.6</b>	234.3
<b>Attributable to:</b>			
<b>Owners of the parent company</b>		<b>240.1</b>	233.9
Non-controlling interests		(0.5)	0.4
		<b>239.6</b>	234.3

The notes on pages 131 to 167 form an integral part of the accounts.

# Consolidated and Parent Company Balance Sheets

as at 31st March 2012

	Notes	Group		Parent company	
		2012 £ million	2011 restated £ million	2012 £ million	2011 £ million
<b>Assets</b>					
<b>Non-current assets</b>					
Property, plant and equipment	15	909.5	907.7	235.7	230.8
Goodwill	16	519.5	528.7	110.5	110.5
Other intangible assets	17	127.8	152.9	5.4	6.4
Investments in subsidiaries	18	–	–	1,546.2	1,506.2
Deferred income tax assets	29	25.4	39.7	14.2	19.9
Available-for-sale investments	19	8.0	8.0	–	–
Swaps related to borrowings	24	29.3	23.7	29.3	23.7
Other receivables	21	3.0	3.0	387.7	524.0
Post-employment benefits net assets	14	2.0	3.8	–	–
<b>Total non-current assets</b>		<b>1,624.5</b>	<b>1,667.5</b>	<b>2,329.0</b>	<b>2,421.5</b>
<b>Current assets</b>					
Inventories	20	630.8	556.3	164.4	154.8
Current income tax assets		11.5	9.4	–	–
Trade and other receivables	21	847.1	893.2	1,009.6	793.3
Cash and cash equivalents – cash and deposits	24	139.1	118.9	78.0	23.1
Other financial assets	25	11.6	6.9	11.2	7.2
<b>Total current assets</b>		<b>1,640.1</b>	<b>1,584.7</b>	<b>1,263.2</b>	<b>978.4</b>
<b>Total assets</b>		<b>3,264.6</b>	<b>3,252.2</b>	<b>3,592.2</b>	<b>3,399.9</b>
<b>Liabilities</b>					
<b>Current liabilities</b>					
Trade and other payables	22	(710.7)	(662.9)	(1,554.4)	(1,286.3)
Current income tax liabilities		(103.1)	(114.2)	(5.5)	(15.4)
Cash and cash equivalents – bank overdrafts	24	(35.8)	(24.5)	(65.9)	(74.1)
Other borrowings and finance leases	24	(56.4)	(181.8)	(40.3)	(146.8)
Other financial liabilities	26	(4.5)	(6.5)	(4.8)	(7.8)
Provisions	28	(34.0)	(60.1)	(17.1)	(2.5)
<b>Total current liabilities</b>		<b>(944.5)</b>	<b>(1,050.0)</b>	<b>(1,688.0)</b>	<b>(1,532.9)</b>
<b>Non-current liabilities</b>					
Borrowings, finance leases and related swaps	24	(530.4)	(575.7)	(530.1)	(575.0)
Deferred income tax liabilities	29	(53.4)	(59.5)	–	–
Employee benefits obligations	14	(171.4)	(134.2)	(96.6)	(73.2)
Provisions	28	(28.8)	(24.2)	(12.6)	(13.3)
Other payables	22	(4.3)	(4.8)	(23.3)	(0.2)
<b>Total non-current liabilities</b>		<b>(788.3)</b>	<b>(798.4)</b>	<b>(662.6)</b>	<b>(661.7)</b>
<b>Total liabilities</b>		<b>(1,732.8)</b>	<b>(1,848.4)</b>	<b>(2,350.6)</b>	<b>(2,194.6)</b>
<b>Net assets</b>		<b>1,531.8</b>	<b>1,403.8</b>	<b>1,241.6</b>	<b>1,205.3</b>
<b>Equity</b>					
Share capital	30	220.7	220.7	220.7	220.7
Share premium account		148.3	148.3	148.3	148.3
Shares held in employee share ownership trust (ESOT)		(50.2)	(35.8)	(50.2)	(35.8)
Other reserves	33	43.0	68.3	6.8	1.8
Retained earnings		1,169.6	1,001.2	916.0	870.3
<b>Total equity attributable to owners of the parent company</b>		<b>1,531.4</b>	<b>1,402.7</b>	<b>1,241.6</b>	<b>1,205.3</b>
Non-controlling interests		0.4	1.1	–	–
<b>Total equity</b>		<b>1,531.8</b>	<b>1,403.8</b>	<b>1,241.6</b>	<b>1,205.3</b>

The accounts were approved by the Board of Directors on 6th June 2012 and signed on its behalf by:

N A P Carson  
R J MacLeod

Directors

# Consolidated and Parent Company Cash Flow Statements

for the year ended 31st March 2012

Notes	Group		Parent company	
	2012 £ million	2011 restated £ million	2012 £ million	2011 £ million
<b>Cash flows from operating activities</b>				
	409.3	259.3	199.2	231.1
Profit before tax				
Adjustments for:				
Dissolution of associate	–	(0.1)	–	–
Discontinued operations	–	(1.9)	–	–
40 Depreciation, amortisation, impairment losses and profit on sale of non-current assets and investments	146.8	168.8	30.9	41.9
Share-based payments	12.8	11.3	7.7	6.7
Increase in inventories	(88.9)	(159.6)	(9.7)	(53.4)
Decrease / (increase) in receivables	24.5	(250.9)	(80.0)	(215.3)
Increase / (decrease) in payables	55.4	113.1	237.1	(96.6)
(Decrease) / increase in provisions	(19.2)	52.0	14.0	5.8
Contributions in excess of employee benefit obligations charge	(30.9)	(26.8)	(30.0)	(23.4)
Changes in fair value of financial instruments	(0.7)	1.7	(0.3)	1.0
Dividends received from subsidiaries	–	–	(80.8)	(123.3)
Net finance costs	24.1	20.7	(20.3)	(20.0)
Income tax paid	(68.8)	(64.7)	(4.2)	(16.0)
<b>Net cash inflow / (outflow) from operating activities</b>	<b>464.4</b>	<b>122.9</b>	<b>263.6</b>	<b>(261.5)</b>
<b>Cash flows from investing activities</b>				
Dividends received from associate	–	3.5	–	–
Dividends received from subsidiaries	–	–	80.8	123.3
34 Purchases of non-current assets and investments	(150.7)	(137.4)	(34.5)	(29.1)
Proceeds from sale of non-current assets and investments	8.3	3.9	–	3.8
34 Purchases of businesses	0.6	(53.1)	–	–
<b>Net cash (outflow) / inflow from investing activities</b>	<b>(141.8)</b>	<b>(183.1)</b>	<b>46.3</b>	<b>98.0</b>
<b>Cash flows from financing activities</b>				
34 Net cost of ESOT transactions in own shares	(25.7)	(9.1)	(25.7)	(9.1)
34 (Repayment of) / proceeds from borrowings and finance leases	(166.4)	96.2	(147.0)	101.0
10 Dividends paid to equity holders of the parent company	(103.1)	(86.1)	(103.1)	(86.1)
Dividends paid to non-controlling interests	–	(0.5)	–	–
Settlement of currency swaps for net investment hedging	8.8	7.4	8.8	7.4
Interest paid	(34.0)	(33.1)	(47.6)	(42.0)
Interest received	11.4	13.7	67.8	63.2
<b>Net cash (outflow) / inflow from financing activities</b>	<b>(309.0)</b>	<b>(11.5)</b>	<b>(246.8)</b>	<b>34.4</b>
<b>Increase / (decrease) in cash and cash equivalents in the year</b>	<b>13.6</b>	<b>(71.7)</b>	<b>63.1</b>	<b>(129.1)</b>
Exchange differences on cash and cash equivalents	(4.7)	1.7	–	–
Cash and cash equivalents at beginning of year	94.4	164.4	(51.0)	78.1
<b>Cash and cash equivalents at end of year</b>	<b>103.3</b>	<b>94.4</b>	<b>12.1</b>	<b>(51.0)</b>
<b>Reconciliation to net debt</b>				
Increase / (decrease) in cash and cash equivalents in the year	13.6	(71.7)	63.1	(129.1)
Repayment of / (proceeds from) borrowings and finance leases	166.4	(96.2)	147.0	(101.0)
Change in net debt resulting from cash flows	180.0	(167.9)	210.1	(230.1)
Borrowings acquired with subsidiaries	–	(20.5)	–	–
Exchange differences on net debt	5.2	22.4	10.0	20.0
Movement in net debt in year	185.2	(166.0)	220.1	(210.1)
Net debt at beginning of year	(639.4)	(473.4)	(749.1)	(539.0)
<b>Net debt at end of year</b>	<b>(454.2)</b>	<b>(639.4)</b>	<b>(529.0)</b>	<b>(749.1)</b>

# Consolidated Statement of Changes in Equity

for the year ended 31st March 2012

	Share capital £ million	Share premium account £ million	Shares held in ESOT £ million	Other reserves (note 33) restated £ million	Retained earnings restated £ million	Total attributable to equity holders restated £ million	Non-controlling interests £ million	Total equity restated £ million
At 1st April 2010	220.7	148.3	(30.7)	73.4	837.7	1,249.4	1.4	1,250.8
Profit for the year	–	–	–	–	181.5	181.5	0.4	181.9
Actuarial gain on post-employment benefits	–	–	–	–	85.4	85.4	–	85.4
Cash flow hedges	–	–	–	3.7	–	3.7	–	3.7
Net investment hedges	–	–	–	2.2	–	2.2	–	2.2
Currency translation differences	–	–	–	(8.9)	–	(8.9)	–	(8.9)
Tax on other comprehensive income	–	–	–	(2.1)	(27.9)	(30.0)	–	(30.0)
Total comprehensive income	–	–	–	(5.1)	239.0	233.9	0.4	234.3
Dividends paid (note 10)	–	–	–	–	(86.1)	(86.1)	(0.7)	(86.8)
Purchase of shares by ESOT	–	–	(16.7)	–	–	(16.7)	–	(16.7)
Share-based payments	–	–	–	–	17.1	17.1	–	17.1
Cost of shares transferred to employees	–	–	11.6	–	(10.3)	1.3	–	1.3
Tax on share-based payments	–	–	–	–	3.8	3.8	–	3.8
At 31st March 2011 (restated)	220.7	148.3	(35.8)	68.3	1,001.2	1,402.7	1.1	1,403.8
Profit for the year	–	–	–	–	315.9	315.9	(0.5)	315.4
Actuarial loss on post-employment benefits	–	–	–	–	(70.6)	(70.6)	–	(70.6)
Cash flow hedges	–	–	–	6.1	–	6.1	–	6.1
Net investment hedges	–	–	–	23.7	–	23.7	–	23.7
Currency translation differences	–	–	–	(53.7)	–	(53.7)	–	(53.7)
Tax on other comprehensive income	–	–	–	(1.4)	20.1	18.7	–	18.7
Total comprehensive income	–	–	–	(25.3)	265.4	240.1	(0.5)	239.6
Dividends paid (note 10)	–	–	–	–	(103.1)	(103.1)	(0.2)	(103.3)
Purchase of shares by ESOT	–	–	(37.0)	–	–	(37.0)	–	(37.0)
Share-based payments	–	–	–	–	18.8	18.8	–	18.8
Cost of shares transferred to employees	–	–	22.6	–	(17.4)	5.2	–	5.2
Tax on share-based payments	–	–	–	–	4.7	4.7	–	4.7
<b>At 31st March 2012</b>	<b>220.7</b>	<b>148.3</b>	<b>(50.2)</b>	<b>43.0</b>	<b>1,169.6</b>	<b>1,531.4</b>	<b>0.4</b>	<b>1,531.8</b>

The notes on pages 131 to 167 form an integral part of the accounts.

## Parent Company Statement of Changes in Equity

for the year ended 31st March 2012

	Share capital £ million	Share premium account £ million	Shares held in ESOT £ million	Other reserves (note 33) £ million	Retained earnings £ million	Total equity £ million
At 1st April 2010	220.7	148.3	(30.7)	0.2	686.0	1,024.5
Profit for the year	-	-	-	-	210.6	210.6
Actuarial gain on post-employment benefits	-	-	-	-	74.8	74.8
Cash flow hedges	-	-	-	0.6	-	0.6
Currency translation differences	-	-	-	1.2	-	1.2
Tax on other comprehensive income	-	-	-	(0.2)	(23.8)	(24.0)
Total comprehensive income	-	-	-	1.6	261.6	263.2
Dividends paid (note 10)	-	-	-	-	(86.1)	(86.1)
Purchase of shares by ESOT	-	-	(16.7)	-	-	(16.7)
Share-based payments	-	-	-	-	15.3	15.3
Cost of shares transferred to employees	-	-	11.6	-	(8.5)	3.1
Tax on share-based payments	-	-	-	-	2.0	2.0
At 31st March 2011	220.7	148.3	(35.8)	1.8	870.3	1,205.3
Profit for the year	-	-	-	-	183.4	183.4
Actuarial loss on post-employment benefits	-	-	-	-	(53.3)	(53.3)
Cash flow hedges	-	-	-	6.7	-	6.7
Currency translation differences	-	-	-	(0.1)	-	(0.1)
Tax on other comprehensive income	-	-	-	(1.6)	14.6	13.0
Total comprehensive income	-	-	-	5.0	144.7	149.7
Dividends paid (note 10)	-	-	-	-	(103.1)	(103.1)
Purchase of shares by ESOT	-	-	(37.0)	-	-	(37.0)
Share-based payments	-	-	-	-	16.2	16.2
Cost of shares transferred to employees	-	-	22.6	-	(14.8)	7.8
Tax on share-based payments	-	-	-	-	2.7	2.7
<b>At 31st March 2012</b>	<b>220.7</b>	<b>148.3</b>	<b>(50.2)</b>	<b>6.8</b>	<b>916.0</b>	<b>1,241.6</b>

# Accounting Policies

for the year ended 31st March 2012

The group's and parent company's significant accounting policies, together with the judgments made by management in applying those policies which have the most significant effect on the amounts recognised in the accounts, are:

## Basis of accounting and preparation

The accounts are prepared in accordance with International Financial Reporting Standards (IFRS) and interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC) or the Standing Interpretations Committee (SIC) as adopted by the European Union. For Johnson Matthey, there are no differences between IFRS as adopted by the European Union and full IFRS as published by the International Accounting Standards Board (IASB) and so the accounts comply with IFRS.

The accounts are prepared on the historical cost basis, except for certain assets and liabilities which are measured at fair value as explained below.

The consolidated accounts for 31st March 2011 have been restated for measurement period adjustments to the fair values of the Intercat, Inc. acquisition (note 39). Also, cost of sales and distribution costs for the year ended 31st March 2011 have been represented by £9.0 million following a reclassification of certain employee costs out of distribution costs in one of the group's businesses to better reflect the nature of the costs.

The parent company has not presented its own income statement, statement of total comprehensive income and related notes as permitted by section 408 of the Companies Act 2006.

## Basis of consolidation

The consolidated accounts comprise the accounts of the parent company and all its subsidiaries, including the employee share ownership trust.

Entities over which the group has the ability to exercise control are accounted for as subsidiaries. Entities that are not subsidiaries or joint ventures but where the group has significant influence (i.e. the power to participate in the financial and operating policy decisions) are accounted for as associates.

The results of businesses acquired or disposed of in the year are consolidated from or up to the effective date of acquisition or disposal respectively. The net assets of businesses acquired are incorporated in the consolidated accounts at their fair values at the date of acquisition.

Transactions and balances between group companies are eliminated. No profit is taken on transactions between group companies.

## Foreign currencies

Foreign currency transactions are recorded in the functional currency of the relevant subsidiary or branch at the exchange rate at the date of transaction. Foreign currency monetary assets and liabilities are retranslated into the relevant functional currency at the exchange rate at the balance sheet date.

Income statements and cash flows of overseas subsidiaries and branches are translated into sterling at the average rates for the year. Balance sheets of overseas subsidiaries and branches, including any fair value adjustments and including related goodwill, are translated into sterling at the exchange rates at the balance sheet date.

Exchange differences arising on the translation of the net investment in overseas subsidiaries and branches, less exchange differences arising on related foreign currency financial instruments which hedge the group's net investment in these operations, are taken to a separate component of equity. The group has taken advantage of the exemption allowed in IFRS 1 – 'First-time Adoption of International Reporting Standards' to deem the cumulative translation difference for all overseas subsidiaries and branches to be zero at 1st April 2004.

Other exchange differences are taken to operating profit.

## Revenue

Revenue comprises all sales of goods and rendering of services at the fair value of consideration received or receivable after the deduction of any trade discounts and excluding sales taxes. Revenue is recognised when it can be measured reliably and the significant risks and rewards of ownership are transferred to the customer. With the sale of goods, this occurs when the goods are despatched or made available to the customer, except for the sale of consignment products located at customers' premises where revenue is recognised on notification that the product has been used. With the rendering of services, revenue is recognised by reference to the stage of completion as measured by the proportion that costs incurred to date bear to the estimated total costs. With royalties and licence income, revenue is recognised in accordance with the substance of the relevant agreement.

## Long term contracts

Where the outcome of a long term contract can be estimated reliably, revenue and costs are recognised by reference to the stage of completion. This is measured by the proportion that contract costs incurred to date bear to the estimated total contract costs.

Where the outcome of a long term contract cannot be estimated reliably, contract revenue is recognised to the extent of contract costs incurred that it is probable will be recoverable. Contract costs are recognised as expenses in the period in which they are incurred.

When it is probable that the total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.

## Finance costs and finance income

Finance costs that are directly attributable to the construction of an asset that necessarily takes a substantial period of time to get ready for its intended use and for which construction was commenced after 1st April 2007 are capitalised as part of the cost of that asset. Other finance costs and finance income are recognised in the income statement in the year incurred.

# Accounting Policies

for the year ended 31st March 2012

## Research and development

Research expenditure is charged to the income statement in the year incurred.

Development expenditure is charged to the income statement in the year incurred unless it meets the IFRS recognition criteria for capitalisation. When the recognition criteria have been met any further development expenditure is capitalised as an intangible asset.

## Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and any provisions for impairment. Finance costs that relate to an asset that takes a substantial period of time to construct and for which construction was started after 1st April 2007 are capitalised as part of the cost of that asset. Other finance costs are not capitalised.

Depreciation is provided at rates calculated to write off the cost less estimated residual value of each asset over its useful life. Certain freehold buildings and plant and equipment are depreciated using the units of production method, as this more closely reflects their expected consumption. All other assets are depreciated using the straight line method. The useful lives vary according to the class of the asset, but are typically: leasehold property 30 years (or the life of the lease if shorter); freehold buildings 30 years; and plant and equipment 4 to 10 years. Freehold land is not depreciated.

## Goodwill

Goodwill arises on the acquisition of a business when the fair value of the consideration given exceeds the fair value attributed to the net assets acquired (including contingent liabilities). It is subject to annual impairment reviews. Acquisition-related costs arising on acquisitions made after 31st March 2010 are charged to the income statement as incurred. Acquisition-related costs arising on acquisitions made on or before 31st March 2010 were regarded as a component of consideration and therefore increased goodwill.

The group and parent company have taken advantage of the exemption allowed under IFRS 1 and so goodwill arising on acquisitions made before 1st April 2004 is included at the carrying amount at that date less any subsequent impairments. Up to 31st March 1998 goodwill was eliminated against equity.

## Intangible assets

Intangible assets are stated at cost less accumulated amortisation and any provisions for impairment. They are amortised in accordance with the relevant income stream or by using the straight line method over the useful lives from the time they are first available for use. The estimated useful lives vary according to the specific asset but are typically: 1 to 12 years for customer contracts and relationships; 3 to 8 years for capitalised computer software; 3 to 20 years for patents, trademarks and licences; 10 years for acquired research and technology; and 3 to 8 years for capitalised development currently being amortised.

Intangible assets which are not yet being amortised are subject to annual impairment reviews.

## Investments in subsidiaries

Investments in subsidiaries are stated in the parent company's balance sheet at cost less any provisions for impairment. If a distribution is received from a subsidiary then the investment in that subsidiary is assessed for an indication of impairment.

## Leases

Leases are classified as finance leases whenever they transfer substantially all the risks and rewards of ownership to the group. The assets are included in property, plant and equipment and the capital elements of the leasing commitments are shown as obligations under finance leases. The assets are depreciated on a basis consistent with similar owned assets or the lease term if shorter. The interest element of the lease rental is included in the income statement.

All other leases are classified as operating leases and the lease costs are expensed on a straight line basis over the lease term.

## Grants

Grants related to assets are included in deferred income and released to the income statement in equal instalments over the expected useful lives of the related assets.

Grants related to income are deducted in reporting the related expense.

## Precious metal inventories

Inventories of gold, silver and platinum group metals are valued according to the source from which the metal is obtained. Metal which has been purchased and committed to future sales to customers or hedged in metal markets is valued at the price at which it is contractually committed or hedged, adjusted for unexpired contango and backwardation. Other precious metal inventories owned by the group, which are unhedged, are valued at the lower of cost and net realisable value using the weighted average cost formula.

## Other inventories

Non-precious metal inventories are valued at the lower of cost, including attributable overheads, and net realisable value. Except where costs are specifically identified, the first-in, first-out or weighted average cost formulae are used to value inventories.

# Accounting Policies

for the year ended 31st March 2012

## Cash and cash equivalents

Cash and deposits comprise cash at bank and in hand, including short term deposits with a maturity date of three months or less from the date of acquisition. The group and parent company routinely use short term bank overdraft facilities, which are repayable on demand, as an integral part of their cash management policy. Therefore cash and cash equivalents in the cash flow statements are cash and deposits less bank overdrafts. Offset arrangements across group businesses have been applied to arrive at the net cash and overdraft figures.

## Derivative financial instruments

The group and parent company use derivative financial instruments, in particular forward currency contracts and currency swaps, to manage the financial risks associated with their underlying business activities and the financing of those activities. The group and parent company do not undertake any trading activity in derivative financial instruments.

Derivative financial instruments are measured at their fair value. Derivative financial instruments may be designated at inception as fair value hedges, cash flow hedges or net investment hedges if appropriate. Derivative financial instruments which are not designated as hedging instruments are classified under IFRS as held for trading, but are used to manage financial risk.

Changes in the fair value of any derivative financial instruments that are not designated as or are not determined to be effective hedges are recognised immediately in the income statement.

Changes in the fair value of derivative financial instruments designated as fair value hedges are recognised in the income statement, together with the related changes in the fair value of the hedged asset or liability. Fair value hedge accounting is discontinued if the hedging instrument expires or is sold, terminated or exercised, the hedge no longer meets the criteria for hedge accounting or the designation is revoked.

Changes in the fair value of derivative financial instruments designated as cash flow hedges are recognised in equity, to the extent that the hedges are effective. Ineffective portions are recognised in the income statement immediately. If the hedged item results in the recognition of a non-financial asset or liability, the amount recognised in equity is transferred out of equity and included in the initial carrying amount of the asset or liability. Otherwise, the amount recognised in equity is transferred to the income statement in the same period that the hedged item is recognised in the income statement. If the hedging instrument expires or is sold, terminated or exercised, the hedge no longer meets the criteria for hedge accounting or the designation is revoked, amounts previously recognised in equity remain in equity until the forecast transaction occurs. If a forecast transaction is no longer expected to occur, the amounts previously recognised in equity are transferred to the income statement.

For hedges of net investments in foreign operations, the effective portion of the gain or loss on the hedging instrument is recognised in equity, while the ineffective portion is recognised in the income statement. Amounts taken to equity are transferred to the income statement when the foreign operations are sold.

## Other financial instruments

All other financial instruments are initially recognised at fair value plus transaction costs. Subsequent measurement is as follows:

- Unhedged borrowings are measured at amortised cost.
- Available-for-sale investments are investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be measured reliably and so are measured at cost.
- All other financial assets and liabilities, including short term receivables and payables, are measured at amortised cost less any impairment provision.

## Taxation

Current and deferred tax are recognised in the income statement, except when they relate to items recognised directly in equity when the related tax is also recognised in equity.

Current tax is the amount of income tax expected to be paid in respect of taxable profits using the tax rates that have been enacted or substantively enacted at the balance sheet date.

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amount in the balance sheet. It is provided using the tax rates that are expected to apply in the period when the asset or liability is settled, based on tax rates that have been enacted or substantively enacted at the balance sheet date.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. No deferred tax asset or liability is recognised in respect of temporary differences associated with investments in subsidiaries, branches and associates where the group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

## Provisions and contingencies

Provisions are recognised when the group has a present obligation as a result of a past event and a reliable estimate can be made of a probable adverse outcome, for example warranties, environmental claims and restructurings. Otherwise, material contingent liabilities are disclosed unless the transfer of economic benefits is remote. Contingent assets are only disclosed if an inflow of economic benefits is probable.

The parent company considers financial guarantees of its subsidiaries' borrowings and precious metal leases to be insurance contracts. These are treated as contingent liabilities unless it becomes probable that it will be required to make a payment under the guarantee.

# Accounting Policies

for the year ended 31st March 2012

## Share-based payments and employee share ownership trust (ESOT)

The fair value of outstanding shares allocated to employees under the long term incentive plan is calculated by adjusting the share price on the date of allocation for the present value of the expected dividends that will not be received. The resulting cost is charged to the income statement over the relevant vesting periods, adjusted to reflect actual and expected levels of vesting where appropriate.

The group and parent company provide finance to the ESOT to purchase company shares in the open market. Costs of running the ESOT are charged to the income statement. The cost of shares held by the ESOT is deducted in arriving at equity until they vest unconditionally in employees.

## Pensions and other post-employment benefits

The group operates a number of contributory and non-contributory plans, mainly of the defined benefit type, which require contributions to be made to separately administered funds.

The costs of the defined contribution plans are charged to the income statement as they fall due.

For defined benefit plans, the group and parent company recognise the net assets or liabilities of the schemes in their balance sheets. Obligations are measured at present value using the projected unit credit method and a discount rate reflecting yields on high quality corporate bonds. Assets are measured at their fair value at the balance sheet date. The changes in scheme assets and liabilities, based on actuarial advice, are recognised as follows:

- The current service cost is spread over the period during which benefit is expected to be derived from the employees' services based on the most recent actuarial valuation and is deducted in arriving at operating profit.
- The interest cost, based on the discount rate at the beginning of the year and the present value of the defined benefit obligation during the year, is included in operating profit.
- The expected return on plan assets, based on market expectations at the beginning of the year for returns over the entire life of the related obligation and amended for changes in the fair value of plan assets as a result of contributions paid in and benefits paid out, is included in operating profit.
- Actuarial gains and losses, representing differences between the expected return and actual return on plan assets and reimbursement rights, differences between actuarial assumptions underlying the plan liabilities and actual experience during the year, and changes in actuarial assumptions, are recognised in the statement of total comprehensive income in the year they occur.
- Past service costs are spread evenly over the period in which the increases in benefit vest and are deducted in arriving at operating profit. If an increase in benefits vests immediately, the cost is recognised immediately.
- Gains or losses arising from settlements or curtailments are included in operating profit.

## Standards and interpretations adopted in the year

During the year, the following new and amendments to accounting standards and interpretations were adopted:

IAS 24 – 'Related Party Disclosures', Amendments to IFRIC 14 – 'Prepayments of a Minimum Funding Requirement', IFRIC 19 – 'Extinguishing Financial Liabilities with Equity Instruments', Amendments to IFRS 1 – 'Limited Exemption from Comparative IFRS 7 Disclosures for First-time Adopters' and the 'Improvements to IFRSs' issued in May 2010 have all been adopted during the year. There was no material impact on the reported results or financial position of the group and parent company.

## Standards and interpretations issued but not yet applied

The impact of the adoption of IFRS 9 – 'Financial Instruments', Amendments to IFRS 9 and IFRS 7 – 'Mandatory Effective Date and Transition Disclosures', IFRS 10 – 'Consolidated Financial Statements', IFRS 11 – 'Joint Arrangements', IFRS 12 – 'Disclosure of Interests in Other Entities' and IFRS 13 – 'Fair Value Measurement' and the revised IAS 27 – 'Separate Financial Statements' and IAS 28 – 'Investments in Associates and Joint Ventures' are still being evaluated.

IAS 19 – 'Employee Benefits' was revised in June 2011 and is applicable for periods beginning on or after 1st January 2013. It removes the 'corridor approach' for recognising actuarial gains and losses and eliminates options for presenting gains and losses which will have no effect on the group and parent company. It also amends the disclosures and requires the replacement of the expected return on plan assets and interest cost on plan obligations with net interest on the net defined benefit liability based on the discount rate. The full effect on the group and parent company is still being evaluated but it is likely to reduce the group's profit before tax by approximately £6 million.

The effects of any standards and interpretations amended or issued after 30th April 2012 have not yet been evaluated.

The group and parent company do not consider that any other standards or interpretations issued by the IASB but not yet applicable will have a significant impact on their reported results or net assets.

# Notes on the Accounts

for the year ended 31st March 2012

## 1 Segmental information

For management purposes, the group is organised into three operating divisions – Environmental Technologies, Precious Metal Products and Fine Chemicals and each division is represented by a director on the Board of Directors. These operating divisions represent the group's segments. Their principal activities are described on pages 26 to 42. The performance of the divisions is assessed by the Board of Directors on underlying operating profit, which is before amortisation of acquired intangibles, major impairment and restructuring charges and profit or loss on disposal of businesses. Each division is also assessed on sales excluding precious metals including inter-segment sales. Sales between segments are made at market prices, taking into account the volumes involved.

### Year ended 31st March 2012

	Environmental Technologies £ million	Precious Metal Products £ million	Fine Chemicals £ million	Eliminations £ million	Total £ million
Revenue from external customers	3,123.6	8,609.4	290.2	–	12,023.2
Inter-segment revenue	131.0	1,232.0	2.2	(1,365.2)	–
<b>Total revenue</b>	<b>3,254.6</b>	<b>9,841.4</b>	<b>292.4</b>	<b>(1,365.2)</b>	<b>12,023.2</b>
External sales excluding the value of precious metals	1,861.9	534.3	282.4	–	2,678.6
Inter-segment sales	13.8	47.7	2.3	(63.8)	–
<b>Sales excluding the value of precious metals</b>	<b>1,875.7</b>	<b>582.0</b>	<b>284.7</b>	<b>(63.8)</b>	<b>2,678.6</b>
Segmental underlying operating profit	211.8	200.8	69.7	–	482.3
Unallocated corporate expenses					(32.2)
<b>Underlying operating profit</b>					<b>450.1</b>
Amortisation of acquired intangibles (note 4)					(16.7)
Operating profit					433.4
Net finance costs					(24.1)
<b>Profit before tax</b>					<b>409.3</b>
Segmental net assets	1,448.6	324.6	418.8	–	2,192.0
Net debt					(454.2)
Post-employment benefits net assets and liabilities					(169.4)
Deferred income tax assets and liabilities					(28.0)
Provisions and non-current other payables					(67.1)
Unallocated corporate net assets					58.5
<b>Total net assets</b>					<b>1,531.8</b>
Segmental capital expenditure	97.1	31.6	15.8	–	144.5
Other additions to non-current assets (excluding financial assets, deferred tax assets and post-employment benefits net assets)	0.3	–	–	(0.3)	–
<b>Segmental total additions to non-current assets</b>	<b>97.4</b>	<b>31.6</b>	<b>15.8</b>	<b>(0.3)</b>	<b>144.5</b>
Corporate capital expenditure					5.1
<b>Total additions to non-current assets</b>					<b>149.6</b>
Segment depreciation and amortisation	82.8	22.6	17.4	–	122.8
Corporate depreciation					3.3
Amortisation of acquired intangibles (note 4)					16.7
<b>Total depreciation and amortisation</b>					<b>142.8</b>

# Notes on the Accounts

for the year ended 31st March 2012

## 1 Segmental information (continued) Year ended 31st March 2011 (restated)

	Environmental Technologies £ million	Precious Metal Products £ million	Fine Chemicals £ million	Eliminations £ million	Total £ million
Revenue from external customers	2,703.4	7,028.3	253.1	–	9,984.8
Inter-segment revenue	4.6	1,241.3	1.9	(1,247.8)	–
<b>Total revenue</b>	<b>2,708.0</b>	<b>8,269.6</b>	<b>255.0</b>	<b>(1,247.8)</b>	<b>9,984.8</b>
External sales excluding the value of precious metals	1,561.3	475.4	243.6	–	2,280.3
Inter-segment sales	4.5	65.8	1.8	(72.1)	–
<b>Sales excluding the value of precious metals</b>	<b>1,565.8</b>	<b>541.2</b>	<b>245.4</b>	<b>(72.1)</b>	<b>2,280.3</b>
Segmental underlying operating profit	164.7	172.9	56.2	–	393.8
Unallocated corporate expenses					(27.6)
<b>Underlying operating profit</b>					<b>366.2</b>
Major impairment and restructuring charges (note 3)					(71.8)
Amortisation of acquired intangibles (note 4)					(14.5)
Operating profit					279.9
Net finance costs					(20.7)
Dissolution of associate					0.1
<b>Profit before tax</b>					<b>259.3</b>
Segmental net assets	1,534.9	357.3	417.5	–	2,309.7
Net debt					(639.4)
Post-employment benefits net assets and liabilities					(130.4)
Deferred income tax assets and liabilities					(19.8)
Provisions and non-current other payables					(89.1)
Unallocated corporate net assets					(27.2)
<b>Total net assets</b>					<b>1,403.8</b>
Segmental capital expenditure	90.1	26.1	16.0	–	132.2
Other additions to non-current assets (excluding financial assets, deferred tax assets and post-employment benefits net assets)	62.8	2.1	10.9	(0.3)	75.5
<b>Segmental total additions to non-current assets</b>	<b>152.9</b>	<b>28.2</b>	<b>26.9</b>	<b>(0.3)</b>	<b>207.7</b>
Corporate capital expenditure					5.7
<b>Total additions to non-current assets</b>					<b>213.4</b>
Segment depreciation and amortisation	78.8	24.3	17.2	–	120.3
Corporate depreciation					2.9
Amortisation of acquired intangibles (note 4)					13.6
<b>Total depreciation and amortisation</b>					<b>136.8</b>

The group received £1,690.0 million of revenue from one external customer (2011 £1,196.8 million) which is 14% (2011 12%) of the group's revenue from external customers. The revenue is reported in Precious Metal Products as it is generated by the group's platinum marketing and distribution activities and so has a very low return on sales.

# Notes on the Accounts

for the year ended 31st March 2012

## 1 Segmental information (continued)

The group's country of domicile is the UK. Revenue from external customers is based on the customer's location. Non-current assets are based on the location of the assets and exclude financial assets, deferred tax assets and post-employment benefits net assets.

	Revenue from external customers		Non-current assets	
	2012	2011	2012	2011
	£ million	£ million	£ million	restated £ million
UK	<b>3,534.4</b>	2,442.0	<b>665.3</b>	665.0
Germany	<b>869.4</b>	762.1	<b>227.9</b>	242.8
Rest of Europe	<b>1,379.7</b>	1,242.3	<b>97.2</b>	105.4
USA	<b>2,896.9</b>	2,690.5	<b>343.3</b>	350.4
Rest of North America	<b>126.8</b>	105.0	<b>16.0</b>	14.2
China (including Hong Kong)	<b>1,497.4</b>	1,197.9	<b>51.8</b>	53.1
Rest of Asia	<b>1,027.4</b>	965.1	<b>123.8</b>	118.6
Rest of World	<b>691.2</b>	579.9	<b>34.3</b>	42.7
Total	<b>12,023.2</b>	9,984.8	<b>1,559.6</b>	1,592.2

## 2 Revenue

	2012 £ million	2011 £ million
Sale of goods	<b>11,771.9</b>	9,801.1
Rendering of services	<b>193.1</b>	145.0
Royalties and licence income	<b>58.2</b>	38.7
<b>Total revenue</b>	<b>12,023.2</b>	9,984.8

## 3 Major impairment and restructuring charges

During the year ended 31st March 2011 the group closed its Haverton manufacturing site in Billingham, UK. This gave rise to a pre-tax impairment and restructuring charge of £14.8 million in that year, which was excluded from underlying operating profit.

During the year ended 31st March 2011 the group announced it was starting consultation with the Works Council about the closure of its autocatalyst facility in Brussels. The plant ceased production in July 2011, the closure of the site then commenced and is expected to be completed during the year ending 31st March 2013. This gave rise to a pre-tax impairment and restructuring charge in the year ended 31st March 2011 of £57.0 million, which was excluded from underlying operating profit. There is no impact in the consolidated income statement in the year ended 31st March 2012.

## 4 Amortisation of acquired intangibles

The amortisation of intangible assets which arise on the acquisition of businesses, together with any subsequent impairment of these intangible assets, is shown separately on the face of the income statement. It is excluded from underlying operating profit.

## Notes on the Accounts

for the year ended 31st March 2012

### 5 Fees payable to auditors

	2012		2011	
	£ million	£ million	£ million	£ million
Fees payable to the company's auditor for the audit of the company's annual accounts		0.5		0.5
Fees payable to the company's auditor and its associates for other services:				
– the audit of the company's subsidiaries, pursuant to legislation	1.1		1.0	
– other services supplied pursuant to legislation	0.1		0.1	
– tax compliance services	0.2		0.2	
– tax advisory services	0.2		0.1	
– due diligence	–		0.1	
– other services	0.1		0.1	
Total fees payable to the company's auditor and its associates for other services		1.7		1.6
<b>Total fees payable to the company's auditor and its associates</b>		<b>2.2</b>		<b>2.1</b>

Audit fees paid to other auditors were £0.1 million (2011 £0.1 million).

### 6 Operating profit

	2012	2011
	£ million	restated £ million
Operating profit is arrived at after charging / (crediting):		
Total research and development expenditure	128.6	109.8
less development expenditure capitalised	(9.1)	(13.0)
Research and development charged	119.5	96.8
less external funding received – from government grants	(2.0)	(1.4)
– from other organisations	(4.2)	(3.9)
Net research and development	113.3	91.5
Other government grants	(0.2)	(0.1)
Inventories recognised as an expense	10,561.4	8,668.9
Write-down of inventories recognised as an expense	8.6	7.1
Reversal of write-down of inventories arising from increases in net realisable value	(2.2)	(1.5)
Net (gains) / losses on foreign exchange	(5.2)	3.8
Net losses / (gains) on foreign currency forwards held for trading	6.0	(2.8)
Cash flow hedges transferred from equity – revenue	(2.3)	(0.5)
– cost of sales	0.1	(0.2)
– total	(2.2)	(0.7)
Depreciation of property, plant and equipment	108.5	108.3
Amortisation of internally generated intangible assets included in cost of sales	12.5	9.6
Amortisation of other intangible assets included in – cost of sales	3.2	3.5
– distribution costs	0.1	0.1
– administrative expenses	1.8	1.7
– amortisation of acquired intangibles (note 4)	16.7	13.6
Operating lease rentals payable – minimum lease payments	13.4	12.8
Operating lease rentals payable – sublease payments received	(0.2)	(0.1)

The items above are for both continuing operations and total group.

# Notes on the Accounts

for the year ended 31st March 2012

## 7 Finance costs

	2012 £ million	2011 £ million
Remaining loss on remeasurement of net investment hedging instruments to fair value	–	0.2
Net loss on remeasurement of fair value hedges and related hedged items to fair value	<b>0.1</b>	–
Net losses on financial assets and liabilities classified as held for trading	<b>0.1</b>	0.2
Interest payable on financial liabilities measured at amortised cost	<b>35.0</b>	32.5
Unwinding of discount on provisions	<b>0.3</b>	0.4
<b>Total finance costs</b>	<b>35.4</b>	33.1

## 8 Finance income

	2012 £ million	2011 £ million
Interest receivable on interest rate swaps	<b>8.2</b>	9.2
Net gains on financial assets and liabilities classified as held for trading	<b>8.2</b>	9.2
Interest receivable on loans and receivables	<b>3.1</b>	3.2
<b>Total finance income</b>	<b>11.3</b>	12.4

## 9 Taxation

	2012 £ million	2011 restated £ million
<b>Current tax</b>		
Corporation tax on profits for the year	<b>82.6</b>	85.9
Adjustment for prior years	<b>(8.4)</b>	2.2
Total current tax	<b>74.2</b>	88.1
<b>Deferred tax</b>		
Origination and reversal of temporary differences	<b>22.7</b>	(11.7)
Changes in tax rates and laws	<b>(2.8)</b>	(2.3)
Benefit from previously unrecognised tax losses, tax credits or temporary differences of prior years	<b>(0.2)</b>	(0.2)
Write-downs, or reversal of previous write-downs, of deferred tax assets	<b>–</b>	1.6
Total deferred tax	<b>19.7</b>	(12.6)
<b>Income tax expense</b>	<b>93.9</b>	75.5

The tax charge for the year can be reconciled to the profit per the income statement as follows:

	2012 £ million	2011 restated £ million
Profit before tax	<b>409.3</b>	259.3
Tax expense at UK corporation tax rate of 26% (2011 28%)	<b>106.4</b>	72.6
Effects of:		
Overseas tax rates	<b>8.5</b>	3.0
Expenses not deductible for tax purposes	<b>1.7</b>	7.1
Unutilised losses	<b>2.6</b>	1.1
Utilisation of tax losses and tax holidays	<b>(4.9)</b>	(6.5)
Adjustments for prior years	<b>(8.6)</b>	2.0
Research and development credits	<b>(7.0)</b>	(5.6)
Other	<b>(4.8)</b>	1.8
Tax expense for the year	<b>93.9</b>	75.5

In March 2012 the UK government enacted a change in the UK corporation tax rate from 26% to 24% effective from 1st April 2012 and so the UK deferred tax balances at 31st March 2012 have been recalculated at the new rate.

## Notes on the Accounts

for the year ended 31st March 2012

### 10 Dividends

	2012 £ million	2011 £ million
2009/10 final ordinary dividend paid – 27.9 pence per share	–	59.4
2010/11 interim ordinary dividend paid – 12.5 pence per share	–	26.7
2010/11 final ordinary dividend paid – 33.5 pence per share	<b>71.2</b>	–
2011/12 interim ordinary dividend paid – 15.0 pence per share	<b>31.9</b>	–
<b>Total dividends</b>	<b>103.1</b>	<b>86.1</b>

A final dividend of 40.0 pence per ordinary share has been proposed by the board which will be paid on 17th August 2012 to shareholders on the register at the close of business on 3rd August 2012. The estimated amount to be paid is £84.8 million and has not been recognised in these accounts. The board is also recommending a special dividend to shareholders of 100.0 pence per ordinary share which will be paid on 17th August 2012 to shareholders on the register at the close of business on 3rd August 2012. This represents a total payment of approximately £212 million and has not been recognised in these accounts.

### 11 Earnings per ordinary share

	2012 pence	2011 restated pence
Total		
Basic	<b>148.7</b>	85.2
Diluted	<b>146.9</b>	84.7
Continuing		
Basic	<b>148.7</b>	86.1
Diluted	<b>146.9</b>	85.6
Discontinued		
Basic	–	(0.9)
Diluted	–	(0.9)

Earnings per ordinary share have been calculated by dividing the profit attributable to equity holders of the parent company by the weighted average number of shares in issue during the period.

	2012 £ million	2011 restated £ million
<b>Earnings</b>		
Profit for the year from continuing operations attributable to equity holders of the parent company	<b>315.9</b>	183.4
Loss for the year from discontinued operations attributable to equity holders of the parent company	–	(1.9)
Profit for the year attributable to equity holders of the parent company	<b>315.9</b>	181.5

	2012	2011
<b>Weighted average number of shares in issue</b>		
Basic	<b>212,431,522</b>	212,907,178
Dilution for share options and long term incentive plans	<b>2,567,460</b>	1,344,782
Diluted	<b>214,998,982</b>	214,251,960

# Notes on the Accounts

for the year ended 31st March 2012

## 11 Earnings per ordinary share (continued)

Underlying earnings per ordinary share are calculated as follows:

	2012 £ million	2011 restated £ million
Profit for the year attributable to equity holders of the parent company	315.9	181.5
Major impairment and restructuring charges (note 3)	–	71.8
Amortisation of acquired intangibles (note 4)	16.7	14.5
Dissolution of associate	–	(0.1)
Loss on disposal of discontinued operations	–	1.9
Tax thereon	(6.1)	(16.2)
<b>Underlying profit for the year</b>	<b>326.5</b>	<b>253.4</b>
	<b>2012 pence</b>	<b>2011 pence</b>
Underlying earnings per share		
Basic	153.7	119.0
Diluted	151.9	118.3

## 12 Employee and key management personnel costs

### 12a Employee numbers

	2012	2011
The average monthly number of employees during the year was:		
Environmental Technologies	5,568	5,313
Precious Metal Products	2,847	2,657
Fine Chemicals	1,089	1,052
Corporate and Central Research	410	366
<b>Average number of employees</b>	<b>9,914</b>	<b>9,388</b>
<b>Actual number of employees at 31st March</b>	<b>10,058</b>	<b>9,742</b>

The number of temporary employees included above at 31st March 2012 was 253 (2011 237).

The actual number of staff was:

	At 31st March 2012			At 31st March 2011		
	Actual employees	Agency staff	Total headcount	Actual employees	Agency staff	Total headcount
Environmental Technologies	5,640	687	6,327	5,569	654	6,223
Precious Metal Products	2,894	165	3,059	2,711	88	2,799
Fine Chemicals	1,090	17	1,107	1,089	35	1,124
Corporate and Central Research	434	4	438	373	6	379
<b>Total</b>	<b>10,058</b>	<b>873</b>	<b>10,931</b>	<b>9,742</b>	<b>783</b>	<b>10,525</b>

### 12b Employee benefits expense

	2012 £ million	2011 £ million
Wages and salaries	392.9	371.2
Social security costs	48.2	36.4
Pension and other post-employment costs	32.3	34.3
Share-based payments	18.8	17.1
<b>Total employee benefits expense</b>	<b>492.2</b>	<b>459.0</b>

Termination benefits of £5.2 million (2011 £33.3 million) are not included above.

## Notes on the Accounts

for the year ended 31st March 2012

### 12 Employee and key management personnel costs (continued)

#### 12c Key management personnel

The key management of the group and parent company consist of the Board of Directors and the members of the Chief Executive's Committee (CEC). During the year ended 31st March 2012 the CEC had eleven members (2011 twelve members). Their compensation charged in the year was:

	2012 £ million	2011 £ million
Short term employee benefits	6.5	6.8
Pension and other post-employment costs	0.4	0.6
Share-based payments	3.6	2.9
Non-executive directors' fees and benefits	0.6	0.6
<b>Total compensation of key management personnel</b>	<b>11.1</b>	<b>10.9</b>

Other than the compensation above there were no transactions with any key management personnel. There were no balances outstanding at the year end.

Information on the directors' remuneration is given in the Remuneration Report on pages 108 to 117.

### 13 Share-based payments

#### Long Term Incentive Plan (LTIP)

Under the LTIP, shares are allocated to approximately 900 of the group's executive directors, senior managers and middle managers based on a percentage of salary and are subject to performance targets over a three year period. At 31st March 2012, shares allocated in 2009, 2010 and 2011 (at 31st March 2011, shares allocated in 2008, 2009 and 2010) were outstanding in respect of which the performance period has not expired. The minimum release of 15% of the allocation is subject to the achievement of underlying earnings per share (EPS) growth of 6% compound per annum over the three year period. For the maximum release of 100% of the allocation, EPS must have grown by at least 15% compound per annum. The number of allocated shares released will vary on a straight line basis between these points. Allocations will lapse if the EPS growth is less than 6% compound per annum over the three year performance period. For the shares allocated in 2009 only, the performance conditions have been relaxed and so the minimum release requires EPS growth of 3% compound per annum and the maximum release requires EPS growth of 10% compound per annum. Of the shares allocated in 2008, 52.42% were released and 47.58% expired during the year.

#### Share options

In 2007 the LTIP was introduced and allocations of shares under this plan replaced the granting of share options. No share options have been granted since the year ended 31st March 2007. Equity settled share options were granted to employees at the average of the market value of the company's shares over the three days prior to the date of grant and were subject to performance targets over a three year period and have a maximum life of ten years. The number of shares over which options were granted was based on a percentage of the employee's salary and approximately 800 employees were granted options each year.

Options granted in 2004 to 2006 were subject to a minimum three year performance target of EPS growth of UK RPI plus 3% per annum. Other performance targets were EPS growth of UK RPI plus 4% per annum and EPS growth of UK RPI plus 5% per annum. If the performance targets were not met at the end of the three year performance period, the options would lapse. The targets for options granted in 2004, 2005 and the 3% and 4% targets for options granted in 2006 have been met and so these options are exercisable. The 5% target for options granted in 2006 was not met and so these options have lapsed. Gains are capped at 100% of the grant price.

Options granted in 2002 and 2003 can only be exercised if the normalised EPS has grown by at least UK RPI plus 4% per annum over any three consecutive years during the life of the options. They were subject to annual retesting until they lapse on the tenth anniversary of grant. Since the targets have been met all these options are exercisable.

#### Deferred bonus

In the year ended 31st March 2012 the bonus rules were changed for the executive directors and members of the Chief Executive's Committee, whereby a proportion of their bonus payable is now awarded as shares and deferred for three years. The first shares will be awarded in August 2012 for the 2011/12 bonus. The Management Development and Remuneration Committee is entitled to claw back the deferred element in cases of misstatement or misconduct or other relevant reason as determined by them.

#### Share Incentive Plan (SIP) – UK and Overseas

Under the SIP, all employees with at least one year of service with the group and who are employed by a participating group company are entitled to contribute up to 2.5% of basic pay each month, subject to a £125 per month limit. The SIP trustees buy shares (partnership shares) at market value each month with the employees' contributions. For each partnership share purchased, the group purchases two shares (matching shares) which are allocated to the employee. In the UK SIP, if the employee sells or transfers partnership shares within three years from the date of allocation, the linked matching shares are forfeited. In the Overseas SIP, partnership shares and matching shares are subject to a three year holding period and cannot be sold or transferred during that time.

# Notes on the Accounts

for the year ended 31st March 2012

## 13 Share-based payments (continued) 401k approved savings investment plans (401k plans)

In the US there are two 401k plans, one for salaried employees and one for hourly employees. Salaried employees may contribute up to 50% of their base pay and hourly employees up to 20% of their base pay, both subject to a statutory limit. Salaried employees choosing Johnson Matthey Plc shares matching are matched 100% of the first 4% contributed and hourly employees are matched 50% of the first 2% contributed. Employees may contribute after one month of service and are eligible for matching after one year of service.

Further details of the directors' remuneration under share-based payment plans are given in the Remuneration Report on pages 108 to 117.

Options were exercised on a regular basis throughout the year. The average share price during the year was 1,943.04 pence (2011 1,787.40 pence).

Activity relating to share options was:

	2012	2012 Weighted average exercise price pence	2011	2011 Weighted average exercise price pence
	Number of options		Number of options	
Outstanding at the start of the year	<b>1,797,780</b>	<b>1,124.02</b>	2,474,307	1,117.88
Forfeited during the year	<b>(15,063)</b>	<b>1,060.78</b>	(24,299)	1,150.11
Exercised during the year	<b>(1,023,850)</b>	<b>1,087.59</b>	(652,228)	1,099.75
Outstanding at the end of the year	<b>758,867</b>	<b>1,174.42</b>	1,797,780	1,124.02
Exercisable at the end of the year	<b>758,867</b>	<b>1,174.42</b>	1,797,780	1,124.02

Details of share options outstanding at the end of the year are:

	2012	2012 Weighted average remaining life years	2011	2011 Weighted average remaining life years
	Number of options		Number of options	
<b>Range of exercise price</b>				
800 pence to 900 pence	<b>199,965</b>	<b>1.1</b>	336,847	1.9
1,000 pence to 1,100 pence	<b>15,335</b>	<b>3.3</b>	710,930	3.9
1,200 pence to 1,300 pence	<b>543,567</b>	<b>4.3</b>	750,003	5.3
	<b>758,867</b>	<b>3.5</b>	1,797,780	4.1

The fair value of the shares allocated during the year under the LTIP was 1,907.2 pence per share allocation (2011 1,523.6 pence per share allocation). The fair value was based on the share price at the date of allocation of 2,040.0 pence (2011 1,636.0 pence) adjusted for the present value of the expected dividends that will not be received at an expected dividend rate of 2.25% (2011 2.38%).

Activity relating to the LTIP was:

	2012 Number of allocated shares	2011 Number of allocated shares
Outstanding at the start of the year	<b>2,402,541</b>	2,176,594
Allocated during the year	<b>937,850</b>	849,617
Forfeited during the year	<b>(127,552)</b>	(50,844)
Released during the year	<b>(280,521)</b>	–
Expired during the year	<b>(256,077)</b>	(572,826)
Outstanding at the end of the year	<b>2,676,241</b>	2,402,541

252,092 (2011 266,614) matching shares under the SIP and 55,442 (2011 64,078) shares under the 401k plans were allocated to employees during the year. They are nil cost awards on which performance conditions are substantially completed at the date of grant. Consequently the fair value of these awards is based on the market value of the shares at that date.

The total expense recognised during the year in respect of equity settled share-based payments, taking into account expected lapses due to leavers and the probability that EPS performance conditions will not be met, was £18.8 million (2011 £17.1 million).

## Notes on the Accounts

for the year ended 31st March 2012

### 14 Post-employment benefits

#### 14a Group

The group operates a number of post-employment benefits plans around the world, the forms and benefits of which vary with conditions and practices in the countries concerned. The majority of the plans are defined benefit which require contributions to be made into separately administered funds and retirement benefits are based on factors such as employees' pensionable salary and length of service. Some of the plans are defined contribution, where the retirement benefits are determined by the value of funds arising from contributions paid in respect of each employee. The group also makes payments to employees' personal pension plans. The amount recognised as an expense for defined contribution plans was £6.9 million (2011 £6.0 million).

The major defined benefit plans are pension plans and post-retirement medical plans in the UK and the US. The UK pension plan is a career average salary plan with a final salary section which was closed to future accrual of benefits from 1st April 2010. The US hourly pension plan is a fixed benefit plan based upon years of service. The US salaried pension plan is a final salary plan. Full actuarial valuations were carried out at 1st April 2009 for the UK pension plan and 30th June 2011 for the US pension plans and the valuations of all of the UK and US plans were updated to 31st March 2012 by qualified independent actuaries.

The main assumptions were:

	2012 UK plans %	2012 US plans %	2012 Other plans %	2011 UK plans %	2011 US plans %	2011 Other plans %
First 3 years rate of increase in salaries	3.40	3.40	3.21	4.50	3.75	3.17
Ultimate rate of increase in salaries	4.15	3.40	3.21	4.50	3.75	3.17
Rate of increase in pensions in payment	3.40	–	1.57	3.50	–	2.44
Discount rate	5.10	4.80	4.78	5.50	5.70	5.57
Inflation		2.75	1.76		2.75	2.06
– UK RPI	3.40			3.50		
– UK CPI	2.70			3.00		
Current medical benefits cost trend rate	5.40	7.78	–	7.70	8.06	–
Ultimate medical benefits cost trend rate	5.40	4.50	–	6.00	4.50	–

The group uses certain mortality assumptions when calculating plan obligations. The current mortality assumptions for all major plans retain prudent allowance for future improvements in longevity and take account of experience.

The group's largest plan is in the UK and for the purposes of calculating that plan's pension liabilities as at 31st March 2012, the group has used SAPS S1 mortality tables based on year of birth (as published by the Institute of Actuaries) for both pensioner and non-pensioner members in conjunction with the results of an investigation into the actual mortality experience of plan members. In addition, to allow for future improvements in longevity, the CMI 2011 tables (published by the Institute of Actuaries) have been used, with an assumed long term rate of future annual mortality improvement of 1.25%.

The mortality tables used for the UK pension plan have been updated since 31st March 2011 following a mortality investigation. Last year the group used PA92 mortality tables projected to calendar year 2009 (as published by the Institute of Actuaries) for both pensioner and non-pensioner members. In addition, allowance for future improvements in longevity was made using the medium cohort projections with a 1% underpin.

The mortality tables used for the other larger plans were:

US	RP2000 projected to 2017 using Scale AA
Netherlands	AG Prognosetafel 2005-2050 with one year age set back
Canada	UP 94 generational (including allowance for future mortality improvements)
Germany	RT2005 G
South Africa	PA(90), rated down by two years

The expected future lifetime of average members currently at age 65 and average members at age 65 in 25 years time (i.e. members who are currently aged 40 years) is respectively:

	Currently age 65		Age 65 in 25 years	
	UK plan	US plans	UK plan	US plans
Male	22.0	18.0	24.2	18.0
Female	24.8	19.9	27.2	19.9

# Notes on the Accounts

for the year ended 31st March 2012

## 14 Post-employment benefits (continued)

### 14a Group (continued)

A 1% point change in the assumed medical cost trend rates would have the following effects on:

	1% point increase		1% point decrease	
	UK plan £ million	US plan £ million	UK plan £ million	US plan £ million
Post-retirement medical plan expense	0.1	0.4	(0.1)	(0.3)
Post-retirement medical plan defined benefit obligation	1.6	4.6	(1.3)	(3.7)

A 0.1% change in the discount rate and rate of increase in salaries would have the following increases / (decreases) on the pension plans' defined benefit obligations at 31st March 2012:

	0.1% point increase		0.1% point decrease	
	UK plan £ million	US plans £ million	UK plan £ million	US plans £ million
Effect of discount rate	(24.7)	(3.0)	24.1	3.1
Effect of rate of increase in salaries	7.3	0.9	(7.3)	(0.9)

A one year increase in life expectancy would have the following increase on:

	UK plan £ million	US plans £ million
Pension defined benefit obligation	28.9	5.1

The fair values and expected rates of return for plan assets were:

	UK pension		US pensions		Other	
	Expected rate of return %	Value £ million	Expected rate of return %	Value £ million	Expected rate of return %	Value £ million
<b>At 31st March 2012</b>						
Equities	7.10	430.7	7.70	86.3	8.57	5.7
Bonds	4.24	550.5	3.70	70.7	4.90	11.0
Property	5.40	47.4	–	–	–	–
Insurance policies	–	–	–	–	4.36	24.0
	5.49	1,028.6	5.90	157.0	5.09	40.7
<b>At 31st March 2011</b>						
Equities	8.10	456.6	7.70	71.0	7.70	10.0
Bonds	5.20	472.6	5.00	63.0	5.19	7.5
Property	6.60	37.6	–	–	–	–
Insurance policies	–	–	–	–	5.28	18.3
	6.62	966.8	6.43	134.0	5.94	35.8

The defined benefit pension plans do not invest directly in Johnson Matthey Plc shares and no property or other assets owned by the pension plans are used by the group. The overall expected rate of return is determined on a country by country basis by reference to market expectations for each class of asset. It is based upon the forecasts of actuaries and market professionals.

## Notes on the Accounts

for the year ended 31st March 2012

### 14 Post-employment benefits (continued)

#### 14a Group (continued)

Movements in the fair value of the plan assets during the year were:

	UK pension £ million	UK post- retirement medical benefits £ million	US pensions £ million	US post- retirement medical benefits £ million	Other £ million	Total £ million
At 1st April 2010	886.7	–	122.5	–	36.0	1,045.2
Expected return on plan assets	60.2	–	8.3	–	1.9	70.4
Settlement losses	–	–	–	–	(3.5)	(3.5)
Actuarial gain	8.1	–	8.5	–	1.4	18.0
Employee contributions	–	–	–	–	0.3	0.3
Company contributions	45.1	0.3	6.2	0.6	1.9	54.1
Benefits paid	(33.3)	(0.3)	(4.4)	(0.6)	(2.0)	(40.6)
Exchange adjustments	–	–	(7.1)	–	(0.2)	(7.3)
At 31st March 2011	966.8	–	134.0	–	35.8	1,136.6
Expected return on plan assets	64.3	–	8.6	–	2.0	74.9
Settlement gains	–	–	–	–	0.9	0.9
Actuarial (loss) / gain	(11.4)	–	10.2	–	3.1	1.9
Employee contributions	–	–	–	–	0.3	0.3
Company contributions	44.7	0.5	8.5	0.7	2.1	56.5
Benefits paid	(35.8)	(0.5)	(4.7)	(0.7)	(1.5)	(43.2)
Exchange adjustments	–	–	0.4	–	(2.0)	(1.6)
<b>At 31st March 2012</b>	<b>1,028.6</b>	<b>–</b>	<b>157.0</b>	<b>–</b>	<b>40.7</b>	<b>1,226.3</b>

The actual return on plan assets for UK plans was £52.9 million (2011 £68.3 million) and for US plans was £18.8 million (2011 £16.8 million). It is estimated that the group will contribute about £58 million to the post-employment defined benefits plans during the year ending 31st March 2013. The latest actuarial valuation of the group's UK pension plan as at 1st April 2012 is underway and additional cash contributions may be required once the valuation is complete.

Movements in the defined benefit obligation during the year were:

	UK pension £ million	UK post- retirement medical benefits £ million	US pensions £ million	US post- retirement medical benefits £ million	Other £ million	Total £ million
At 1st April 2010	(1,043.6)	(14.4)	(149.6)	(28.5)	(54.2)	(1,290.3)
Current service cost – in operating profit	(22.8)	(0.1)	(6.8)	(0.9)	(2.1)	(32.7)
Current service cost – capitalised	(0.1)	–	–	–	–	(0.1)
Past service cost – vested	(1.9)	–	–	–	–	(1.9)
Past service cost – non-vested	–	–	–	0.4	–	0.4
Interest cost	(56.5)	(0.8)	(8.2)	(1.6)	(2.7)	(69.8)
Curtailment gains	–	–	–	–	4.4	4.4
Settlement gains	–	–	–	–	3.5	3.5
Employee contributions	–	–	–	–	(0.3)	(0.3)
Actuarial gain / (loss)	64.2	2.5	(0.2)	2.6	(0.9)	68.2
Benefits paid	33.3	0.3	4.4	0.6	2.0	40.6
Exchange adjustments	–	–	8.3	1.6	0.7	10.6
At 31st March 2011	(1,027.4)	(12.5)	(152.1)	(25.8)	(49.6)	(1,267.4)
Current service cost – in operating profit	(23.0)	(0.1)	(6.9)	(0.8)	(1.7)	(32.5)
Current service cost – capitalised	(0.1)	–	–	–	–	(0.1)
Past service cost – vested	(0.2)	–	–	–	(0.1)	(0.3)
Interest cost	(55.5)	(0.7)	(8.5)	(1.5)	(2.6)	(68.8)
Curtailment gains	–	–	–	–	0.2	0.2
Settlement losses	–	–	–	–	(0.9)	(0.9)
Employee contributions	–	–	–	–	(0.3)	(0.3)
Actuarial (loss) / gain	(43.0)	1.1	(19.7)	(3.3)	(8.6)	(73.5)
Benefits paid	35.8	0.5	4.7	0.7	1.5	43.2
Exchange adjustments	–	–	(0.5)	(0.1)	2.8	2.2
<b>At 31st March 2012</b>	<b>(1,113.4)</b>	<b>(11.7)</b>	<b>(183.0)</b>	<b>(30.8)</b>	<b>(59.3)</b>	<b>(1,398.2)</b>

# Notes on the Accounts

for the year ended 31st March 2012

## 14 Post-employment benefits (continued)

### 14a Group (continued)

Movements in the reimbursement rights during the year were:

	UK pension £ million	UK post-retirement medical benefits £ million	US pensions £ million	US post-retirement medical benefits £ million	Other £ million	Total £ million
At 1st April 2010	–	–	–	5.5	0.6	6.1
Expected return	–	–	–	0.5	–	0.5
Actuarial loss	–	–	–	(0.8)	–	(0.8)
Company contributions	–	–	–	–	0.1	0.1
Exchange adjustments	–	–	–	(0.3)	–	(0.3)
At 31st March 2011	–	–	–	4.9	0.7	5.6
Expected return	–	–	–	0.5	–	0.5
Actuarial gain	–	–	–	1.0	–	1.0
<b>At 31st March 2012</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>6.4</b>	<b>0.7</b>	<b>7.1</b>

Amounts recognised in the income statement in respect of these plans were:

	UK pension £ million	UK post-retirement medical benefits £ million	US pensions £ million	US post-retirement medical benefits £ million	Other £ million	Total £ million
<b>Year ended 31st March 2012</b>						
Current service cost	(23.0)	(0.1)	(6.9)	(0.8)	(1.7)	(32.5)
Interest on plan liabilities	(55.5)	(0.7)	(8.5)	(1.5)	(2.6)	(68.8)
Expected return on plan assets	64.3	–	8.6	–	2.0	74.9
Expected return on reimbursement rights	–	–	–	0.5	–	0.5
Curtailment gains	–	–	–	–	0.2	0.2
Past service cost – vested	(0.2)	–	–	–	(0.1)	(0.3)
Past service cost – non-vested	–	–	–	0.6	–	0.6
Charge to income	(14.4)	(0.8)	(6.8)	(1.2)	(2.2)	(25.4)
<b>Year ended 31st March 2011</b>						
Current service cost	(22.8)	(0.1)	(6.8)	(0.9)	(2.1)	(32.7)
Interest on plan liabilities	(56.5)	(0.8)	(8.2)	(1.6)	(2.7)	(69.8)
Expected return on plan assets	60.2	–	8.3	–	1.9	70.4
Expected return on reimbursement rights	–	–	–	0.5	–	0.5
Curtailment gains	–	–	–	–	4.4	4.4
Past service cost – vested	(1.9)	–	–	–	–	(1.9)
Past service cost – non-vested	–	–	–	0.8	–	0.8
Charge to income	(21.0)	(0.9)	(6.7)	(1.2)	1.5	(28.3)

Of the total charge for the year, £15.3 million (2011 £20.7 million) has been included within cost of sales, £3.0 million (2011 £4.9 million) in distribution costs, £7.1 million (2011 £5.9 million) in administrative expenses and a credit of £ nil (2011 £3.2 million) in major impairment and restructuring charges.

## Notes on the Accounts

for the year ended 31st March 2012

### 14 Post-employment benefits (continued)

#### 14a Group (continued)

The net post-employment benefits assets and liabilities shown in the balance sheet are analysed as:

	UK pension £ million	UK post-retirement medical benefits £ million	US pensions £ million	US post-retirement medical benefits £ million	Other £ million	Total £ million
<b>At 31st March 2012</b>						
Present value of funded obligations	(1,113.4)	–	(183.0)	–	(45.0)	(1,341.4)
Present value of unfunded obligations	–	(11.7)	–	(30.8)	(14.3)	(56.8)
Defined benefit obligation	(1,113.4)	(11.7)	(183.0)	(30.8)	(59.3)	(1,398.2)
Fair value of plan assets	1,028.6	–	157.0	–	40.7	1,226.3
Reimbursement rights	–	–	–	6.4	0.7	7.1
Unrecognised past service credit – non-vested	–	–	–	(2.3)	–	(2.3)
Net post-employment benefits assets and liabilities	(84.8)	(11.7)	(26.0)	(26.7)	(17.9)	(167.1)
<b>At 31st March 2011</b>						
Present value of funded obligations	(1,027.4)	–	(152.1)	–	(37.8)	(1,217.3)
Present value of unfunded obligations	–	(12.5)	–	(25.8)	(11.8)	(50.1)
Defined benefit obligation	(1,027.4)	(12.5)	(152.1)	(25.8)	(49.6)	(1,267.4)
Fair value of plan assets	966.8	–	134.0	–	35.8	1,136.6
Reimbursement rights	–	–	–	4.9	0.7	5.6
Unrecognised past service credit – non-vested	–	–	–	(2.9)	–	(2.9)
Net post-employment benefits assets and liabilities	(60.6)	(12.5)	(18.1)	(23.8)	(13.1)	(128.1)

These are included in the balance sheet as:

	2012 Post-employment benefits net assets £ million	2012 Employee benefits obligations £ million	2012 Total £ million	2011 Post-employment benefits net assets £ million	2011 Employee benefits obligations £ million	2011 Total £ million
UK pension plan	–	(84.8)	(84.8)	–	(60.6)	(60.6)
UK post-retirement medical benefits plan	–	(11.7)	(11.7)	–	(12.5)	(12.5)
US pension plans	–	(26.0)	(26.0)	–	(18.1)	(18.1)
US post-retirement medical benefits plan	–	(26.7)	(26.7)	–	(23.8)	(23.8)
Other plans	2.0	(19.9)	(17.9)	3.8	(16.9)	(13.1)
Total post-employment plans	2.0	(169.1)	(167.1)	3.8	(131.9)	(128.1)
Other long term employee benefits	–	(2.3)	–	–	(2.3)	–
<b>Total long term employee benefits obligations</b>	–	<b>(171.4)</b>	–	–	<b>(134.2)</b>	–

The cumulative amount of actuarial gains / (losses) recognised in the statement of total comprehensive income were:

	UK pension £ million	UK post-retirement medical benefits £ million	US pensions £ million	US post-retirement medical benefits £ million	Other £ million	Total £ million
At 1st April 2010	(249.0)	(2.2)	(34.7)	(3.2)	(4.8)	(293.9)
Recognised in year	72.3	2.5	8.3	1.8	0.5	85.4
At 31st March 2011	(176.7)	0.3	(26.4)	(1.4)	(4.3)	(208.5)
Recognised in year	(54.4)	1.1	(9.5)	(2.3)	(5.5)	(70.6)
<b>At 31st March 2012</b>	<b>(231.1)</b>	<b>1.4</b>	<b>(35.9)</b>	<b>(3.7)</b>	<b>(9.8)</b>	<b>(279.1)</b>

# Notes on the Accounts

for the year ended 31st March 2012

## 14 Post-employment benefits (continued)

### 14a Group (continued)

History of the plans and experience adjustments are:

	UK pension £ million	UK post- retirement medical benefits £ million	US pensions £ million	US post- retirement medical benefits £ million	Other £ million	Total £ million
<b>Year ended 31st March 2012</b>						
Present value of defined benefit obligation	(1,113.4)	(11.7)	(183.0)	(30.8)	(59.3)	(1,398.2)
Fair value of plan assets	1,028.6	–	157.0	–	40.7	1,226.3
Reimbursement rights	–	–	–	6.4	0.7	7.1
Deficit in the plan	(84.8)	(11.7)	(26.0)	(24.4)	(17.9)	(164.8)
Experience adjustments arising on plan liabilities	–	0.3	0.7	(3.3)	(3.0)	(5.3)
Experience adjustments arising on plan assets	(11.4)	–	10.2	–	3.1	1.9
<b>Year ended 31st March 2011</b>						
Present value of defined benefit obligation	(1,027.4)	(12.5)	(152.1)	(25.8)	(49.6)	(1,267.4)
Fair value of plan assets	966.8	–	134.0	–	35.8	1,136.6
Reimbursement rights	–	–	–	4.9	0.7	5.6
Deficit in the plan	(60.6)	(12.5)	(18.1)	(20.9)	(13.1)	(125.2)
Experience adjustments arising on plan liabilities	2.7	(0.2)	(0.2)	3.3	0.6	6.2
Experience adjustments arising on plan assets	8.1	–	8.5	–	1.4	18.0
<b>Year ended 31st March 2010</b>						
Present value of defined benefit obligation	(1,043.6)	(14.4)	(149.6)	(28.5)	(54.2)	(1,290.3)
Fair value of plan assets	886.7	–	122.5	–	36.0	1,045.2
Reimbursement rights	–	–	–	5.5	0.6	6.1
Deficit in the plan	(156.9)	(14.4)	(27.1)	(23.0)	(17.6)	(239.0)
Experience adjustments arising on plan liabilities	(5.2)	1.2	(2.1)	0.4	(0.2)	(5.9)
Experience adjustments arising on plan assets	173.4	–	19.8	–	1.9	195.1
<b>Year ended 31st March 2009</b>						
Present value of defined benefit obligation	(715.6)	(12.0)	(128.3)	(26.7)	(45.3)	(927.9)
Fair value of plan assets	670.4	–	77.9	–	29.4	777.7
Reimbursement rights	–	–	–	4.5	–	4.5
Deficit in the plan	(45.2)	(12.0)	(50.4)	(22.2)	(15.9)	(145.7)
Experience adjustments arising on plan liabilities	24.4	(0.6)	0.9	(1.0)	0.3	24.0
Experience adjustments arising on plan assets	(191.2)	–	(32.4)	–	(3.8)	(227.4)
<b>Year ended 31st March 2008</b>						
Present value of defined benefit obligation	(744.4)	(10.9)	(86.4)	(15.6)	(39.0)	(896.3)
Fair value of plan assets	809.5	–	78.5	–	27.1	915.1
Reimbursement rights	–	–	–	2.6	–	2.6
Surplus / (deficit) in the plan	65.1	(10.9)	(7.9)	(13.0)	(11.9)	21.4
Experience adjustments arising on plan liabilities	(3.0)	–	5.9	1.8	(0.4)	4.3
Experience adjustments arising on plan assets	(87.7)	–	(6.9)	–	(2.8)	(97.4)

## Notes on the Accounts

for the year ended 31st March 2012

### 14 Post-employment benefits (continued)

#### 14b Parent company

The parent company is the sponsoring employer of the group's UK defined benefit pension plan and the UK post-retirement medical benefits plan. There is no contractual agreement or stated policy for charging the net defined benefit cost for the plan to the individual group entities. The main assumptions used for these plans are disclosed in note 14a.

The fair values and expected rates of return for defined benefit pension plan assets were:

	2012 Expected rate of return %	2012 Value £ million	2011 Expected rate of return %	2011 Value £ million
Equities	7.10	430.7	8.10	456.6
Bonds	4.24	550.5	5.20	472.6
Property	5.40	47.4	6.60	37.6
	<b>5.49</b>	<b>1,028.6</b>	6.62	966.8

The defined benefit pension plan does not invest directly in Johnson Matthey Plc shares and no property or other assets owned by the pension plan are used by the company. The overall expected rate of return is determined by reference to market expectations for each class of asset. It is based upon the forecasts of actuaries and market professionals.

Movements in the fair value of the plan assets during the year were:

	2012 Pension £ million	2012 Post- retirement medical benefits £ million	2011 Pension £ million	2011 Post- retirement medical benefits £ million
At beginning of year	966.8	–	886.7	–
Expected return on plan assets	64.3	–	60.2	–
Actuarial (loss) / gain	(11.4)	–	8.1	–
Company contributions	44.7	0.5	45.1	0.3
Benefits paid	(35.8)	(0.5)	(33.3)	(0.3)
At end of year	<b>1,028.6</b>	<b>–</b>	966.8	–

The actual return on plan assets was £52.9 million (2011 £68.3 million). It is estimated that the company will contribute about £42 million (and its subsidiaries will also contribute about £6 million) to the company's post-employment defined benefits plans during the year ending 31st March 2013. The latest actuarial valuation of the company's pension plan as at 1st April 2012 is underway and additional cash contributions may be required once the valuation is complete.

Movements in the defined benefit obligation during the year were:

	2012 Pension £ million	2012 Post- retirement medical benefits £ million	2011 Pension £ million	2011 Post- retirement medical benefits £ million
At beginning of year	(1,027.4)	(12.5)	(1,043.6)	(14.4)
Current service cost – in operating profit	(23.0)	(0.1)	(22.8)	(0.1)
Current service cost – capitalised	(0.1)	–	(0.1)	–
Past service cost – vested	(0.2)	–	(1.9)	–
Interest cost	(55.5)	(0.7)	(56.5)	(0.8)
Actuarial (loss) / gain	(43.0)	1.1	64.2	2.5
Benefits paid	35.8	0.5	33.3	0.3
At end of year	<b>(1,113.4)</b>	<b>(11.7)</b>	(1,027.4)	(12.5)

# Notes on the Accounts

for the year ended 31st March 2012

## 14 Post-employment benefits (continued)

### 14b Parent company (continued)

The net post-employment benefits assets and liabilities shown in the balance sheet are analysed as:

	2012	2012	2011	2011
	Pension	Post- retirement medical benefits	Pension	Post- retirement medical benefits
	£ million	£ million	£ million	£ million
Present value of funded obligations	(1,113.4)	–	(1,027.4)	–
Present value of unfunded obligations	–	(11.7)	–	(12.5)
Defined benefit obligation	(1,113.4)	(11.7)	(1,027.4)	(12.5)
Fair value of plan assets	1,028.6	–	966.8	–
Net retirement benefits assets and liabilities	(84.8)	(11.7)	(60.6)	(12.5)

These are included in the balance sheet under employee benefits obligations as:

	2012	2011
	£ million	£ million
Pension plan	(84.8)	(60.6)
Post-retirement medical benefits plan	(11.7)	(12.5)
Total post-employment plans	(96.5)	(73.1)
Other long term employee benefits	(0.1)	(0.1)
<b>Total long term employee benefits obligations</b>	<b>(96.6)</b>	<b>(73.2)</b>

The cumulative amount of actuarial gains / (losses) recognised in the statement of changes in equity were:

	2012	2012	2011	2011
	Pension	Post- retirement medical benefits	Pension	Post- retirement medical benefits
	£ million	£ million	£ million	£ million
At beginning of year	(178.1)	0.3	(250.4)	(2.2)
Recognised in year	(54.4)	1.1	72.3	2.5
At end of year	(232.5)	1.4	(178.1)	0.3

History of the plans and experience adjustments are:

	Present value of defined benefit obligation £ million	Fair value of plan assets £ million	Surplus / (deficit) in plan £ million	Experience adjustments arising on plan liabilities £ million	Experience adjustments arising on plan assets £ million
<b>Year ended 31st March 2012</b>					
Pension	(1,113.4)	1,028.6	(84.8)	–	(11.4)
Post-retirement medical benefits	(11.7)	–	(11.7)	0.3	–
<b>Year ended 31st March 2011</b>					
Pension	(1,027.4)	966.8	(60.6)	2.7	8.1
Post-retirement medical benefits	(12.5)	–	(12.5)	(0.2)	–
<b>Year ended 31st March 2010</b>					
Pension	(1,043.6)	886.7	(156.9)	(5.2)	173.4
Post-retirement medical benefits	(14.4)	–	(14.4)	1.2	–
<b>Year ended 31st March 2009</b>					
Pension	(715.6)	670.4	(45.2)	24.4	(191.2)
Post-retirement medical benefits	(12.0)	–	(12.0)	(0.6)	–
<b>Year ended 31st March 2008</b>					
Pension	(744.4)	809.5	65.1	(3.0)	(87.7)
Post-retirement medical benefits	(10.9)	–	(10.9)	–	–

# Notes on the Accounts

for the year ended 31st March 2012

## 15 Property, plant and equipment

### 15a Group

	Freehold land & buildings £ million	Long & short leasehold £ million	Plant & machinery £ million	Assets in the course of construction £ million	Total £ million
<b>Cost</b>					
At 1st April 2010	416.0	22.7	1,190.7	51.9	1,681.3
Additions	5.4	1.7	51.7	61.3	120.1
Acquisitions (restated) (note 39)	4.4	–	15.3	0.7	20.4
Reclassifications	11.9	0.7	37.6	(50.2)	–
Disposals	(7.2)	(0.1)	(35.4)	–	(42.7)
Exchange adjustments (restated)	(4.4)	(0.4)	(18.0)	(1.3)	(24.1)
At 31st March 2011 (restated)	426.1	24.6	1,241.9	62.4	1,755.0
Additions	5.8	0.4	53.7	77.0	136.9
Reclassifications	8.6	0.1	36.7	(45.4)	–
Disposals	(1.8)	(0.1)	(72.9)	(8.3)	(83.1)
Exchange adjustments	(6.4)	(0.9)	(22.0)	(2.5)	(31.8)
At 31st March 2012	432.3	24.1	1,237.4	83.2	1,777.0
<b>Accumulated depreciation and impairment</b>					
At 1st April 2010	116.7	9.8	633.2	–	759.7
Charge for the year	14.5	2.7	91.1	–	108.3
Impairment losses	0.5	3.6	23.2	–	27.3
Disposals	(3.3)	(0.1)	(32.8)	–	(36.2)
Exchange adjustments	(1.6)	–	(10.2)	–	(11.8)
At 31st March 2011	126.8	16.0	704.5	–	847.3
Charge for the year	14.5	0.9	93.1	–	108.5
Impairment losses	–	1.4	1.6	–	3.0
Reversal of impairment losses	–	–	(2.8)	–	(2.8)
Disposals	(1.5)	–	(69.8)	–	(71.3)
Exchange adjustments	(1.6)	(0.7)	(14.9)	–	(17.2)
At 31st March 2012	138.2	17.6	711.7	–	867.5
<b>Carrying amount at 31st March 2012</b>	<b>294.1</b>	<b>6.5</b>	<b>525.7</b>	<b>83.2</b>	<b>909.5</b>
Carrying amount at 31st March 2011 (restated)	299.3	8.6	537.4	62.4	907.7
Carrying amount at 1st April 2010	299.3	12.9	557.5	51.9	921.6

The carrying amount of plant and machinery includes £1.6 million (2011 £1.9 million) in respect of assets held under finance leases.

Compensation received for impaired or lost property, plant and equipment was £3.0 million (2011 £ nil).

Finance costs capitalised were £0.7 million (2011 £0.5 million) and the capitalisation rate used to determine the amount of finance costs eligible for capitalisation was 4.4% (2011 5.6%).

The impairment losses for freehold land and buildings of £ nil (2011 £0.5 million) have been included in major impairment and restructuring charges (note 3). Of the impairment losses for long and short leaseholds in the year £0.3 million (2011 £ nil) have been included in cost of sales, £0.7 million (2011 £ nil) in administrative expenses and £0.4 million (2011 £3.6 million) in major impairment and restructuring charges (note 3). Of the impairment losses for plant and machinery £1.0 million (2011 £0.1 million) have been included in administrative expenses, £0.6 million in cost of sales (2011 £0.7 million) and £ nil (2011 £22.4 million) in major impairment and restructuring charges (note 3). Impairment losses of £0.6 million, £1.0 million and £1.4 million are included in the underlying operating profit of Environmental Technologies, Precious Metal Products and Fine Chemicals respectively and arose as the assets have become idle.

Of the reversal of impairment losses for plant and machinery, £2.1 million (2011 £ nil) is included in major impairment and restructuring charges and relates to assets impaired in the year ended 31st March 2011 as part of the closure of the Brussels autocatalyst facility (note 3), which were subsequently transferred to other group companies or sold. £0.7 million (2011 £ nil) is included in cost of sales and relates to assets impaired in the year ended 31st March 2011 as they were damaged in the Japanese earthquake in March 2011 and were thought to be beyond repair, but have subsequently been able to be repaired. These are included in Environmental Technologies' underlying operating profit.

# Notes on the Accounts

for the year ended 31st March 2012

## 15 Property, plant and equipment (continued)

### 15b Parent company

	Freehold land & buildings £ million	Long & short leasehold £ million	Plant & machinery £ million	Assets in the course of construction £ million	Total £ million
<b>Cost</b>					
At 1st April 2010	96.4	0.2	346.2	2.0	444.8
Additions	2.5	0.9	22.3	2.8	28.5
Reclassifications	–	–	2.7	(2.7)	–
Disposals	(4.7)	(0.1)	(4.3)	–	(9.1)
At 31st March 2011	94.2	1.0	366.9	2.1	464.2
Additions	3.1	–	25.0	5.5	33.6
Reclassifications	–	–	4.0	(4.0)	–
Disposals	(1.3)	–	(3.8)	(0.2)	(5.3)
At 31st March 2012	96.0	1.0	392.1	3.4	492.5
<b>Accumulated depreciation and impairment</b>					
At 1st April 2010	32.4	0.1	167.0	–	199.5
Charge for the year	2.6	0.1	27.2	–	29.9
Impairment losses	0.5	–	7.6	–	8.1
Disposals	(0.8)	(0.1)	(3.2)	–	(4.1)
At 31st March 2011	34.7	0.1	198.6	–	233.4
Charge for the year	2.7	–	25.3	–	28.0
Disposals	(1.1)	–	(3.5)	–	(4.6)
At 31st March 2012	36.3	0.1	220.4	–	256.8
<b>Carrying amount at 31st March 2012</b>	<b>59.7</b>	<b>0.9</b>	<b>171.7</b>	<b>3.4</b>	<b>235.7</b>
Carrying amount at 31st March 2011	59.5	0.9	168.3	2.1	230.8
Carrying amount at 1st April 2010	64.0	0.1	179.2	2.0	245.3

The carrying amount of plant and machinery includes £1.5 million (2011 £1.8 million) in respect of assets held under finance leases.

# Notes on the Accounts

for the year ended 31st March 2012

## 16 Goodwill

	Group £ million	Parent company £ million
<b>Cost</b>		
At 1st April 2010	513.8	110.5
Acquisitions (restated) (note 39)	20.0	–
Adjustments to consideration of prior year's acquisitions	(0.1)	–
Exchange adjustments	(5.0)	–
At 31st March 2011 (restated)	528.7	110.5
Exchange adjustments	(9.2)	–
At 31st March 2012	519.5	110.5
<b>Impairment</b>		
At 1st April 2010, 31st March 2011 and 31st March 2012	–	–
<b>Carrying amount at 31st March 2012</b>	<b>519.5</b>	<b>110.5</b>
Carrying amount at 31st March 2011 (restated)	528.7	110.5
Carrying amount at 1st April 2010	513.8	110.5

Goodwill arising on the acquisition of businesses is allocated, at acquisition, to the cash-generating units (CGUs) that are expected to benefit from that business combination. Goodwill is allocated as follows:

	Group		Parent company	
	2012 £ million	2011 restated £ million	2012 £ million	2011 £ million
Environmental Technologies				
Emission Control Technologies – Non-light Duty Catalysts	84.4	89.2	–	–
Process Technologies	245.3	249.4	110.5	110.5
Precious Metal Products				
Catalysts and Chemicals	24.8	24.9	–	–
Other	5.6	5.8	–	–
Fine Chemicals				
Macfarlan Smith	117.1	117.1	–	–
Pharmaceutical Materials and Services	20.7	20.7	–	–
Research Chemicals	21.6	21.6	–	–
	<b>519.5</b>	528.7	<b>110.5</b>	110.5

The group and parent company test goodwill annually for impairment, or more frequently if there are indications that goodwill might be impaired. The recoverable amounts of the CGUs are determined using value in use calculations which use cash flow projections based on financial budgets and plans approved by management, generally covering a three year period except as discussed below. The budgets and plans are based on a number of key assumptions. Assumptions on the likelihood and timing of new product launches are based on management's best estimate of what may happen. Foreign exchange rates are based on actual rates at the time the budgets were prepared and are held constant over the budget and plan years. Other assumptions such as market share, expected changes to selling prices, product profitability, precious metal prices and other direct input costs are based on past experience and management's expectations of future changes in the markets using external sources of information where appropriate. These cash flows are then extrapolated using the long term average growth rates for the relevant products, industries and countries in which the CGUs operate. The cash flows are discounted at the group's estimated pre-tax weighted average cost of capital adjusted for the estimated tax cash flows and risk applicable to each CGU.

For the Non-light Duty Catalysts CGU five (2011 four) year plans have been approved by management. Over the next decade management expects the markets for heavy duty diesel catalysts and stationary emissions catalysts will continue to grow significantly, based on emission control legislation already in place or anticipated, as described on pages 30 and 31 of the Financial Review of Operations, although some of this growth is now included in the five year plan. Therefore the cash flow projections have been extrapolated using a long term average growth rate of 12% for years 6 to 10 (2011 20% for years 5 to 10) and 4% (2011 3%) after that. The discount rate used was 12.3% (2011 10.4%). The impairment test results in headroom of 40% over the carrying value of the CGU's net assets and so it is unlikely that a reasonably possible change in a key assumption would result in an impairment of goodwill.

# Notes on the Accounts

for the year ended 31st March 2012

## 16 Goodwill (continued)

For Process Technologies the long term average growth rate used was 5% (2011 5%) and the discount rate was 12.0% (2011 10.1%). For Catalysts and Chemicals the long term average growth rate used was 4.7% (2011 5%) and the discount rate was 12.0% (2011 10.1%). For Macfarlan Smith the long term average growth rate used was 2.5% (2011 2.5%) and the discount rate was 8.0% (2011 7.6%). For Pharmaceutical Materials and Services the long term average growth rate used was 4% (2011 4%) and the discount rate was 8.3% (2011 7.4%). For Research Chemicals the long term average growth rate used was 5% (2011 5%) and the discount rate was 9.2% (2011 8.3%). These impairment tests all result in headroom of over of 100%, except for Macfarlan Smith which is over 80%, and so it is unlikely that a reasonably possible change in a key assumption would result in an impairment of goodwill.

## 17 Other intangible assets

### 17a Group

	Customer contracts and relationships £ million	Computer software £ million	Patents, trademarks and licences £ million	Acquired research and technology £ million	Development expenditure £ million	Total £ million
<b>Cost</b>						
At 1st April 2010	51.9	49.4	19.6	21.6	85.8	228.3
Additions	–	4.7	0.1	–	13.0	17.8
Acquisitions (restated) (note 39)	22.1	–	9.2	3.8	–	35.1
Disposals	–	(0.1)	–	–	–	(0.1)
Exchange adjustments (restated)	(0.5)	(0.5)	0.1	(0.2)	(1.6)	(2.7)
At 31st March 2011 (restated)	73.5	53.5	29.0	25.2	97.2	278.4
Additions	–	3.5	0.1	–	9.1	12.7
Disposals	–	(2.5)	–	–	–	(2.5)
Exchange adjustments	(2.4)	(1.5)	(0.5)	(1.1)	(1.2)	(6.7)
At 31st March 2012	71.1	53.0	28.6	24.1	105.1	281.9
<b>Accumulated amortisation and impairment</b>						
At 1st April 2010	21.8	36.0	6.1	–	32.8	96.7
Charge for the year (restated)	11.3	4.3	3.2	0.1	9.6	28.5
Impairment losses	–	0.4	–	0.9	0.6	1.9
Disposals	–	(0.1)	–	–	–	(0.1)
Exchange adjustments	–	(0.6)	–	–	(0.9)	(1.5)
At 31st March 2011 (restated)	33.1	40.0	9.3	1.0	42.1	125.5
Charge for the year	13.0	4.0	3.6	1.2	12.5	34.3
Disposals	–	(2.5)	–	–	–	(2.5)
Exchange adjustments	(1.5)	(0.9)	(0.3)	–	(0.5)	(3.2)
At 31st March 2012	44.6	40.6	12.6	2.2	54.1	154.1
<b>Carrying amount at 31st March 2012</b>	<b>26.5</b>	<b>12.4</b>	<b>16.0</b>	<b>21.9</b>	<b>51.0</b>	<b>127.8</b>
Carrying amount at 31st March 2011	40.4	13.5	19.7	24.2	55.1	152.9
Carrying amount at 1st April 2010	30.1	13.4	13.5	21.6	53.0	131.6

The carrying amount of development expenditure includes £29.8 million (2011 £23.9 million) which is not yet being amortised as the assets are not yet available for use. The carrying amount of acquired research and technology includes £2.4 million (2011 £23.9 million) which is not yet being amortised as the assets are not yet available for use. These assets are tested for impairment annually.

The impairment losses for computer software of £ nil (2011 £0.4 million) have been included in major impairment and restructuring charges (note 3). The impairment losses for acquired research and technology of £ nil (2011 £0.9 million) have been included in amortisation of acquired intangibles (note 4). The impairment losses for development expenditure of £ nil (2011 £0.6 million) have been included in administrative expenses.

## Notes on the Accounts

for the year ended 31st March 2012

### 17 Other intangible assets (continued)

#### 17b Parent company

##### Cost

At 1st April 2010  
Additions

At 31st March 2011  
Additions  
Disposals

At 31st March 2012

##### Accumulated amortisation and impairment

At 1st April 2010  
Charge for the year

At 31st March 2011  
Charge for the year  
Disposals

At 31st March 2012

##### Carrying amount at 31st March 2012

Carrying amount at 31st March 2011

Carrying amount at 1st April 2010

	Computer software £ million	Development expenditure £ million	Total £ million
At 1st April 2010	14.4	8.0	22.4
Additions	0.8	1.0	1.8
At 31st March 2011	15.2	9.0	24.2
Additions	1.2	–	1.2
Disposals	(1.0)	–	(1.0)
At 31st March 2012	15.4	9.0	24.4
At 1st April 2010	12.1	4.0	16.1
Charge for the year	1.1	0.6	1.7
At 31st March 2011	13.2	4.6	17.8
Charge for the year	1.0	1.2	2.2
Disposals	(1.0)	–	(1.0)
At 31st March 2012	13.2	5.8	19.0
<b>Carrying amount at 31st March 2012</b>	<b>2.2</b>	<b>3.2</b>	<b>5.4</b>
Carrying amount at 31st March 2011	2.0	4.4	6.4
Carrying amount at 1st April 2010	2.3	4.0	6.3

### 18 Investments in subsidiaries

At 1st April 2010  
Capital reduction of subsidiary  
Impairment loss

At 31st March 2011  
Additional shares issued by subsidiary

##### At 31st March 2012

	Cost of investments in subsidiaries £ million	Accumulated impairment £ million	Carrying amount £ million
At 1st April 2010	1,703.9	(185.2)	1,518.7
Capital reduction of subsidiary	(11.6)	–	(11.6)
Impairment loss	–	(0.9)	(0.9)
At 31st March 2011	1,692.3	(186.1)	1,506.2
Additional shares issued by subsidiary	40.0	–	40.0
<b>At 31st March 2012</b>	<b>1,732.3</b>	<b>(186.1)</b>	<b>1,546.2</b>

The principal subsidiaries are shown in note 42.

### 19 Non-current available-for-sale investments

Unquoted investments

	2012 £ million	2011 £ million
Unquoted investments	8.0	8.0

# Notes on the Accounts

for the year ended 31st March 2012

## 20 Inventories

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Raw materials and consumables	154.8	136.2	31.6	28.5
Work in progress	229.1	200.9	87.3	79.2
Finished goods and goods for resale	246.9	219.2	45.5	47.1
	<b>630.8</b>	<b>556.3</b>	<b>164.4</b>	<b>154.8</b>

The group also holds customers' materials in the process of refining and fabrication and for other reasons.

## 21 Trade and other receivables

	Group		Parent company	
	2012 £ million	2011 restated £ million	2012 £ million	2011 £ million
<b>Current</b>				
Trade receivables	690.3	764.2	139.4	214.1
Amounts receivable from long term contract customers	12.3	13.0	–	–
Amounts receivable from subsidiaries	–	–	827.7	555.8
Prepayments and accrued income	68.7	34.2	34.5	8.9
Value added tax and other sales tax receivable	31.5	29.0	3.9	3.2
Other receivables	44.3	52.8	4.1	11.3
<b>Current trade and other receivables</b>	<b>847.1</b>	<b>893.2</b>	<b>1,009.6</b>	<b>793.3</b>
<b>Non-current</b>				
Amounts receivable from subsidiaries	–	–	387.6	523.9
Prepayments and accrued income	2.9	2.9	0.1	0.1
Other receivables	0.1	0.1	–	–
<b>Non-current trade and other receivables</b>	<b>3.0</b>	<b>3.0</b>	<b>387.7</b>	<b>524.0</b>

## 22 Trade and other payables

	Group		Parent company	
	2012 £ million	2011 restated £ million	2012 £ million	2011 £ million
<b>Current</b>				
Trade payables	344.7	313.8	103.6	111.3
Amounts payable to long term contract customers	80.4	46.7	–	–
Amounts payable to subsidiaries	–	–	1,206.9	956.3
Accruals and deferred income	222.8	244.5	77.7	76.0
Other payables	62.8	57.9	166.2	142.7
<b>Current trade and other payables</b>	<b>710.7</b>	<b>662.9</b>	<b>1,554.4</b>	<b>1,286.3</b>
<b>Non-current</b>				
Amounts payable to subsidiaries	–	–	22.6	–
Accruals and deferred income	1.7	2.5	–	0.2
Other payables	2.6	2.3	0.7	–
<b>Non-current trade and other payables</b>	<b>4.3</b>	<b>4.8</b>	<b>23.3</b>	<b>0.2</b>

## Notes on the Accounts

for the year ended 31st March 2012

### 23 Long term contracts

	2012 £ million	2011 £ million
Contract revenue recognised	<b>117.1</b>	75.7
Contracts in progress at the year end:		
Costs incurred plus recognised profits less recognised losses in the year	<b>116.4</b>	69.3
Costs incurred plus recognised profits less recognised losses to date	<b>244.9</b>	241.4
Amount of advances received	<b>73.6</b>	42.2

### 24 Net debt

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
<b>Non-current borrowings, finance leases and related swaps</b>				
Bank, other loans and related swaps				
4.66% Euro Bonds 2021	<b>83.3</b>	88.4	<b>83.3</b>	88.4
5.67% US Dollar Bonds 2016	<b>110.9</b>	106.2	<b>110.9</b>	106.2
4.95% US Dollar Bonds 2015	<b>135.8</b>	133.8	<b>135.8</b>	133.8
4.987% Euro European Investment Bank (EIB) loan 2013	<b>104.2</b>	110.7	<b>104.2</b>	110.7
5.55% US Dollar Bonds 2013	<b>62.6</b>	62.4	<b>62.6</b>	62.4
5.17% Sterling Bonds 2013	–	40.0	–	40.0
Cross currency interest rate swaps designated as cash flow hedges	<b>0.3</b>	0.3	<b>0.3</b>	0.3
Other repayable from two to three years	–	31.5	–	31.2
Other repayable from one to two years	<b>31.5</b>	0.3	<b>31.3</b>	–
Finance leases repayable				
After five years	<b>0.2</b>	0.6	<b>0.2</b>	0.6
From four to five years	<b>0.4</b>	0.4	<b>0.4</b>	0.4
From three to four years	<b>0.4</b>	0.4	<b>0.4</b>	0.4
From two to three years	<b>0.4</b>	0.4	<b>0.4</b>	0.3
From one to two years	<b>0.4</b>	0.3	<b>0.3</b>	0.3
Non-current borrowings, finance leases and related swaps	<b>530.4</b>	575.7	<b>530.1</b>	575.0
<b>Current borrowings and finance leases</b>				
5.17% Sterling Bonds 2013	<b>40.0</b>	–	<b>40.0</b>	–
Other bank and other loans	<b>16.1</b>	181.5	–	146.5
Finance leases	<b>0.3</b>	0.3	<b>0.3</b>	0.3
Current borrowings and finance leases excluding bank overdrafts	<b>56.4</b>	181.8	<b>40.3</b>	146.8
Bank overdrafts	<b>35.8</b>	24.5	<b>65.9</b>	74.1
Current borrowings and finance leases	<b>92.2</b>	206.3	<b>106.2</b>	220.9
<b>Total borrowings and finance leases</b>	<b>622.6</b>	782.0	<b>636.3</b>	795.9
Less interest rate swaps designated as fair value hedges	<b>29.3</b>	23.7	<b>29.3</b>	23.7
Less cash and deposits	<b>139.1</b>	118.9	<b>78.0</b>	23.1
<b>Net debt</b>	<b>454.2</b>	639.4	<b>529.0</b>	749.1

Of the 4.95% US Dollar Bonds 2015, US \$35.0 million have been swapped into sterling at 5.15% and US \$165.0 million have been swapped into floating rate US dollars. All the 5.67% US Dollar Bonds 2016 have been swapped into floating rate US dollars. The interest rate implicit in the finance leases is 5.9% and the lease term ends in 2017. Apart from the bonds, EIB loans and finance leases shown separately above, all the loans, overdrafts and bank deposits are denominated in various currencies and bear interest at commercial floating rates.

# Notes on the Accounts

for the year ended 31st March 2012

## 25 Other financial assets

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Forward foreign exchange contracts and options designated as cash flow hedges	7.0	3.3	7.1	3.8
Forward foreign exchange contracts and currency swaps held for trading	3.1	1.9	2.9	2.0
Foreign exchange swaps designated as hedges of a net investment in foreign operations	0.3	0.3	–	–
Embedded derivatives	1.2	1.4	1.2	1.4
	<b>11.6</b>	6.9	<b>11.2</b>	7.2

Of the other financial assets listed above, all are measured at fair value using observable inputs (level 2 inputs per IFRS 7's fair value hierarchy) except for certain embedded derivatives which are valued based on both observable and unobservable inputs (level 3 inputs).

The reconciliation of other financial assets valued using level 3 inputs is:

	Group £ million	Parent company £ million
At 1st April 2010	1.2	1.2
Gains recognised in cost of sales	5.1	5.1
Settlements	(4.9)	(4.9)
At 31st March 2011	1.4	1.4
Gains recognised in cost of sales	4.8	4.8
Settlements	(5.0)	(5.0)
<b>At 31st March 2012</b>	<b>1.2</b>	<b>1.2</b>

There were no transfers between the levels of IFRS 7's fair value hierarchy during the year.

## 26 Other financial liabilities

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Forward foreign exchange contracts and options designated as cash flow hedges	0.6	3.1	1.6	5.3
Forward foreign exchange contracts and currency swaps held for trading	3.9	2.0	3.2	2.5
Foreign exchange swaps designated as hedges of a net investment in foreign operations	–	1.4	–	–
	<b>4.5</b>	6.5	<b>4.8</b>	7.8

All other financial liabilities are measured at fair value using observable inputs (level 2 inputs per IFRS 7's fair value hierarchy).

## 27 Financial risk management

The group's and parent company's activities expose them to a variety of financial risks including market risk, liquidity risk and credit risk. Market risk includes currency risk, interest rate risk and price risk. The main financial risks managed by the group and parent company, under policies approved by the board, are foreign currency risk, interest rate risk, liquidity risk and credit risk. The group and parent company use derivative financial instruments, in particular forward currency contracts and currency swaps, to manage their financial risks associated with their underlying business activities and the financing of those activities. Some derivative financial instruments used to manage financial risk are not designated as hedges and so are classified as 'held for trading'. The group and parent company do not undertake any speculative trading activity in financial instruments.

# Notes on the Accounts

for the year ended 31st March 2012

## 27 Financial risk management (continued)

### 27a Foreign currency risk

The group operates globally with a significant amount of its profit earned outside the UK. In order to protect the group's sterling balance sheet and reduce cash flow risk the group has financed most of its investment in the USA and Europe by borrowing US dollars and euros respectively. Although much of this funding is obtained by directly borrowing the relevant currency, a part is achieved through currency swaps which can be more efficient and reduce costs. To a lesser extent the group has also financed a portion of its investment in China, Japan and South Africa using currency borrowings and swaps. The group has designated the currency swaps and two euro loans (fair value of the loans was £202.0 million (2011 £205.1 million)) as hedges of net investments in foreign operations as they hedge the changes in values of the subsidiaries' net assets against movements in exchange rates.

The main currencies of the net debt after taking into account the effect of the currency swaps were:

	Group		Group		Parent company		Parent company	
	Borrowings 2012 £ million	Borrowings 2011 £ million	Cash 2012 £ million	Cash 2011 £ million	Borrowings 2012 £ million	Borrowings 2011 £ million	Cash 2012 £ million	Cash 2011 £ million
Sterling	220.4	338.3	394.9	497.7	240.2	338.4	390.6	496.9
US dollar	424.3	509.2	75.9	95.2	421.9	499.1	69.4	86.6
Euro	372.8	500.8	38.1	72.0	388.4	540.7	23.1	55.9
South African rand	28.9	22.6	52.2	59.0	19.7	22.6	51.5	37.8
Hong Kong dollar	–	0.3	46.5	45.0	–	0.3	46.0	42.8
Chinese renminbi	19.7	54.6	9.9	8.5	14.4	41.0	–	–
South Korean won	19.3	4.6	5.2	3.1	17.0	–	–	–
Japanese yen	10.2	40.6	2.1	8.1	16.9	40.6	1.4	3.4
Canadian dollar	6.9	6.7	8.6	20.3	7.9	7.8	8.5	17.3
Indian rupee	9.8	1.1	9.0	15.4	–	–	–	–
Other currencies	5.4	4.5	21.1	19.6	5.3	6.8	12.2	7.5
	<b>1,117.7</b>	1,483.3	<b>663.5</b>	843.9	<b>1,131.7</b>	1,497.3	<b>602.7</b>	748.2

The group and parent company use forward exchange contracts, and occasionally purchased currency options, to hedge foreign exchange exposures arising on forecast receipts and payments in foreign currencies. These are designated and accounted for as cash flow hedges. The majority of the cash flows are expected to occur and the hedge effect realised in the income statement in the year ending 31st March 2013.

The main impact of movements in exchange rates on the group's results arises on translation of overseas subsidiaries' profits into sterling. The group's largest exposure is to the US dollar and a 5% (8.0 cent (2011 7.8 cent)) movement in the average exchange rate for the US dollar against sterling would have had a £7.3 million (2011 £4.6 million) impact on operating profit. The group is also exposed to the euro and a 5% (5.8 cent (2011 5.9 cent)) movement in the average exchange rate for the euro against sterling would have had a £3.7 million (2011 £3.0 million) impact on operating profit. This exposure is part of the group's economic risk of operating globally which is essential to remain competitive in the markets in which the group operates.

For financial instruments the main exposures are to the US dollar and euro and are due to loans, swaps and cash flow hedges on forecast receipts and payments. A 5% (8.0 cent (2011 8.0 cent)) movement in the closing exchange rate for the US dollar against sterling would have had a £3.1 million (2011 £4.4 million) impact on operating profit and a £20.8 million (2011 £23.9 million) impact on equity for these instruments. A 5% (6.0 cent (2011 5.7 cent)) movement in the closing exchange rate for the euro against sterling would have had a £5.7 million (2011 £4.6 million) impact on operating profit and a £21.4 million (2011 £27.2 million) impact on equity for these instruments. However, the impact on operating profit relates primarily to the cash flow hedging instruments hedging the forecast receipts and payments whose cash flows have occurred in the year and so would be offset by similar movements in the hedged items. Similarly, the impact on equity relates primarily to foreign exchange positions used to hedge the subsidiaries' net assets and so would be offset by an equal and opposite movement in the value of the relevant subsidiaries' net assets. The remaining impact on equity of £3.3 million (2011 £3.2 million) for the US dollar and £4.6 million (2011 £5.7 million) for the euro relates to cash flow hedging instruments hedging the forecast receipts and payments whose cash flows have yet to occur.

# Notes on the Accounts

for the year ended 31st March 2012

## 27 Financial risk management (continued)

### 27b Interest rate risk

The group's and parent company's interest rate risk arises from their fixed rate borrowings (fair value risk) and floating rate borrowings (cash flow risk). Their policy is to optimise interest cost and reduce volatility in reported earnings and equity. They manage their risk by reviewing the profile of their debt regularly and by selectively using interest rate and cross currency swaps to maintain borrowings in appropriate currencies and at competitive rates. The group and parent company have designated the US dollar fixed rate to US dollar floating rate swaps as fair value hedges as they hedge the changes in fair value of bonds attributable to changes in interest rates. The gains on the interest rate swaps in the year ended 31st March 2012 were £5.6 million (2011 £5.0 million) and the losses on the bonds attributable to the hedged risk were £5.7 million (2011 £5.0 million). The group and parent company have designated the US dollar fixed interest rate to sterling fixed interest rate cross currency swap as a cash flow hedge as it hedges the movement in the cash flows of the hedged bond attributable to changes in the US dollar / sterling exchange rate. The cross currency swap's cash flows are expected to occur in 2015 when the bond which it hedges matures. The interest element of the cash flow hedge is realised in the income statement each year and the exchange effect is expected to be realised in the income statement in 2015. At 31st March 2012, 73% (2011 54%) of the group's net debt and 62% (2011 44%) of the parent company's net debt were at fixed rates with an average interest rate of 4.91% (2011 5.06%). The remaining debt is funded on a floating rate basis. Based on the group's net debt funded at floating rates, after taking into account the effect of the swaps, a 1% change in all interest rates would have a £1.2 million (2011 £3.0 million) impact on the group's profit before tax. This is within the range the board regards as acceptable.

### 27c Fair value of financial instruments

The fair value of financial instruments is approximately equal to book value except for:

	2012		2011	
	Carrying amount £ million	Fair value £ million	Carrying amount £ million	Fair value £ million
<b>Group</b>				
US Dollar Bonds 2013, 2015 and 2016	(309.3)	(334.1)	(302.4)	(304.2)
Euro Bonds 2021	(83.3)	(93.6)	(88.4)	(89.7)
Euro EIB loan 2013	(104.2)	(108.4)	(110.7)	(115.4)
Sterling Bonds 2013	(40.0)	(41.1)	(40.0)	(42.0)
<b>Parent company</b>				
Amounts receivable from subsidiaries	1,215.3	1,247.8	1,079.7	1,084.1
US Dollar Bonds 2013, 2015 and 2016	(309.3)	(334.1)	(302.4)	(304.2)
Euro Bonds 2021	(83.3)	(93.6)	(88.4)	(89.7)
Euro EIB loan 2013	(104.2)	(108.4)	(110.7)	(115.4)
Sterling Bonds 2013	(40.0)	(41.1)	(40.0)	(42.0)

The fair values are calculated by discounting future cash flows to net present values using appropriate market interest rates prevailing at the year end. It is not possible to determine reliably the fair value of the group's unquoted available-for-sale investments which have a book value of £8.0 million (2011 £8.0 million) as there is no active market. These are investments in a company that is in the start up phase and in an investment vehicle that invests in start up companies and so there is a wide range of possible values. Given their size it would be overly onerous to provide additional detail.

### 27d Liquidity risk

The group's and parent company's policy on funding capacity is to ensure that they always have sufficient long term funding and committed bank facilities in place to meet foreseeable peak borrowing requirements. At 31st March 2012 the group and parent company had no borrowings under committed bank facilities (2011 £146.7 million). The group and parent company also have a number of uncommitted facilities, including metal leases, and overdraft lines at their disposal.

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
<b>Undrawn committed borrowing facilities</b>				
Expiring within one year	120.8	94.2	120.8	94.2
Expiring in more than one year but not more than two years	131.3	68.5	131.3	68.5
Expiring in more than two years	60.0	7.0	60.0	7.0
	312.1	169.7	312.1	169.7

# Notes on the Accounts

for the year ended 31st March 2012

## 27 Financial risk management (continued)

### 27d Liquidity risk (continued)

The maturity analyses for financial liabilities showing the remaining contractual undiscounted cash flows, including future interest payments but excluding unamortised transaction costs, were:

Group as at 31st March 2012	Within 1 year £ million	1 to 2 years £ million	2 to 5 years £ million	After 5 years £ million	Total £ million
Bank overdrafts	35.8	–	–	–	35.8
Bank and other loans – principal	56.2	198.5	219.0	83.3	557.0
Bank and other loans – interest payments	29.2	22.1	28.7	15.3	95.3
Finance lease obligations	0.4	0.5	1.3	0.2	2.4
Financial liabilities in trade and other payables	588.8	0.8	0.5	0.4	590.5
<b>Total non-derivative financial liabilities</b>	<b>710.4</b>	<b>221.9</b>	<b>249.5</b>	<b>99.2</b>	<b>1,281.0</b>
Foreign exchange forwards, options and swaps – payments	370.8	2.2	0.7	–	373.7
Foreign exchange forwards, options and swaps – receipts	(366.4)	(2.2)	(0.7)	–	(369.3)
<b>Total derivative financial liabilities</b>	<b>4.4</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>4.4</b>

### Group as at 31st March 2011 (restated)

Group as at 31st March 2011 (restated)	Within 1 year £ million	1 to 2 years £ million	2 to 5 years £ million	After 5 years £ million	Total £ million
Bank overdrafts	24.5	–	–	–	24.5
Bank and other loans – principal	181.5	40.3	329.3	181.8	732.9
Bank and other loans – interest payments	29.3	27.1	53.6	25.9	135.9
Finance lease obligations	0.4	0.4	1.4	0.6	2.8
Financial liabilities in trade and other payables	570.9	0.6	0.4	0.5	572.4
<b>Total non-derivative financial liabilities</b>	<b>806.6</b>	<b>68.4</b>	<b>384.7</b>	<b>208.8</b>	<b>1,468.5</b>
Foreign exchange forwards, options and swaps – payments	518.2	0.9	0.6	–	519.7
Foreign exchange forwards, options and swaps – receipts	(511.1)	(1.0)	(0.6)	–	(512.7)
<b>Total derivative financial liabilities</b>	<b>7.1</b>	<b>(0.1)</b>	<b>–</b>	<b>–</b>	<b>7.0</b>

### Parent company as at 31st March 2012

Parent company as at 31st March 2012	Within 1 year £ million	1 to 2 years £ million	2 to 5 years £ million	After 5 years £ million	Total £ million
Bank overdrafts	65.9	–	–	–	65.9
Bank and other loans – principal	40.0	198.1	219.0	83.3	540.4
Bank and other loans – interest payments	27.3	21.9	28.7	15.3	93.2
Finance lease obligations	0.4	0.4	1.3	0.2	2.3
Financial liabilities in trade and other payables	1,539.4	0.1	0.3	22.9	1,562.7
<b>Total non-derivative financial liabilities</b>	<b>1,673.0</b>	<b>220.5</b>	<b>249.3</b>	<b>121.7</b>	<b>2,264.5</b>
Foreign exchange forwards, options and swaps – payments	395.9	4.6	0.8	–	401.3
Foreign exchange forwards, options and swaps – receipts	(391.3)	(4.5)	(0.7)	–	(396.5)
<b>Total derivative financial liabilities</b>	<b>4.6</b>	<b>0.1</b>	<b>0.1</b>	<b>–</b>	<b>4.8</b>

### Parent company as at 31st March 2011

Parent company as at 31st March 2011	Within 1 year £ million	1 to 2 years £ million	2 to 5 years £ million	After 5 years £ million	Total £ million
Bank overdrafts	74.1	–	–	–	74.1
Bank and other loans – principal	146.5	40.0	328.9	181.8	697.2
Bank and other loans – interest payments	27.9	26.9	53.5	25.9	134.2
Finance lease obligations	0.4	0.4	1.3	0.6	2.7
Financial liabilities in trade and other payables	1,286.3	–	–	0.2	1,286.5
<b>Total non-derivative financial liabilities</b>	<b>1,535.2</b>	<b>67.3</b>	<b>383.7</b>	<b>208.5</b>	<b>2,194.7</b>
Foreign exchange forwards, options and swaps – payments	527.3	3.7	0.7	–	531.7
Foreign exchange forwards, options and swaps – receipts	(518.2)	(3.6)	(0.6)	–	(522.4)
<b>Total derivative financial liabilities</b>	<b>9.1</b>	<b>0.1</b>	<b>0.1</b>	<b>–</b>	<b>9.3</b>

# Notes on the Accounts

for the year ended 31st March 2012

## 27 Financial risk management (continued)

### 27e Credit risk

Within certain businesses, the group and parent company derive a significant proportion of their revenue from sales to major customers. Sales to individual customers are frequently high if the value of precious metals is included in the price. The failure of any such company to honour its debts could materially impact the group's and parent company's results. The group and parent company derive significant benefit from trading with their large customers and manage the risk at many levels. Each business and division has a credit committee that regularly monitors its exposure. The Audit Committee receives a report every six months that details all significant credit limits, amounts due and amounts overdue within the group and the relevant actions being taken. At 31st March 2012 trade receivables for the group amounted to £690.3 million (2011 £764.2 million) (parent company £139.4 million (2011 £214.1 million)). £482.2 million (2011 £516.0 million) of these receivables at group level (£103.7 million (2011 £128.2 million) at parent company level) arose in Emission Control Technologies (ECT) which is part of Environmental Technologies Division and mainly supplies the automotive industry including car and truck manufacturers and component suppliers. Although ECT has a wide spread of the available customers the concentrated nature of this industry means that amounts owed by individual customers can be large. Other parts of the group tend to sell to a larger number of customers and amounts owed tend to be lower. As at 31st March 2012 (and at 31st March 2011) for the group as a whole, no single outstanding balance exceeded 2% of the group's revenue. No assets have been taken possession of as collateral.

The credit profiles of the group's and parent company's customers are obtained from credit rating agencies and are closely monitored. The scope of these reviews includes amounts overdue and credit limits. Generally, payments in the automotive industry and in the other markets in which the group operates are made promptly.

Trade receivables are considered impaired when the amount is in dispute, customers are in financial difficulty or for other reasons which imply there is doubt over the recoverability of the debt. Trade receivables can be analysed as:

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Amounts neither past due nor impaired	<b>618.8</b>	680.0	<b>129.3</b>	195.4
Amounts past due but not impaired				
less than 30 days	<b>52.2</b>	65.9	<b>7.2</b>	14.6
30 – 90 days	<b>11.3</b>	12.8	<b>1.8</b>	4.1
more than 90 days	<b>8.5</b>	5.5	<b>1.2</b>	0.3
Total past due but not impaired	<b>72.0</b>	84.2	<b>10.2</b>	19.0
Amounts impaired	<b>4.8</b>	7.2	<b>1.1</b>	1.5
Specific allowances for bad and doubtful debts	<b>(4.4)</b>	(6.5)	<b>(1.1)</b>	(1.3)
Carrying amount of impaired receivables	<b>0.4</b>	0.7	<b>-</b>	0.2
Other allowances for bad and doubtful debts	<b>(0.9)</b>	(0.7)	<b>(0.1)</b>	(0.5)
Trade receivables net of allowances	<b>690.3</b>	764.2	<b>139.4</b>	214.1

Movements in the allowances for impairments were:

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
At beginning of year	<b>7.2</b>	7.5	<b>1.8</b>	2.8
Charge for year	<b>2.9</b>	3.9	<b>0.7</b>	1.3
Acquisitions	<b>-</b>	0.1	<b>-</b>	-
Release	<b>(1.7)</b>	(3.1)	<b>(0.2)</b>	(2.2)
Utilised	<b>(2.9)</b>	(1.1)	<b>(1.1)</b>	(0.1)
Exchange adjustments	<b>(0.2)</b>	(0.1)	<b>-</b>	-
<b>At end of year</b>	<b>5.3</b>	7.2	<b>1.2</b>	1.8

Financial assets included in sundry receivables are all current and not impaired.

The credit risk on cash and deposits and derivative financial instruments is limited because the counterparties with significant balances are banks with high credit ratings. The exposure to individual banks is monitored frequently against internally defined limits together with the bank's credit ratings and credit default swap prices. As at 31st March 2012, the maximum exposure with a single bank for deposits was £12.8 million (2011 £15.9 million) for the group and £12.2 million (2011 £10.7 million) for the parent company, whilst the largest mark to market exposure for derivative financial instruments to a single bank was £14.3 million (2011 £11.9 million) for the group and parent company. The group and parent company also use money market funds to invest surplus cash thereby further diversifying credit risk and at 31st March 2012 the group's and parent company's exposure to these funds was £59.7 million (2011 £ nil). The amounts on deposit at the year end represent the group's and parent company's maximum exposure to credit risk on cash and deposits.

The parent company also guarantees some of its subsidiaries' borrowings, partly through interest netting arrangements, and precious metal leases and its exposure at 31st March 2012 was £26.8 million (2011 £31.1 million).

## Notes on the Accounts

for the year ended 31st March 2012

### 27 Financial risk management (continued)

#### 27f Capital management

The group's policy for managing capital is to maintain an efficient balance sheet to ensure that the group always has sufficient resources to be able to invest in future growth. The group has a long term target of a return on invested capital (underlying operating profit divided by average capital employed) of over 20% to ensure focus on efficient use of the group's capital. See the section on return on invested capital in the Financial Review of Operations on page 44 for more information. The group also has a long term target of net debt (including post tax pension deficits) to EBITDA of between 1.5 and 2.0 times although in any given year it may fall outside this range depending on future plans. See the section on capital structure in the Financial Review of Operations on page 46 for more information.

	Group		Parent company	
	2012 £ million	2011 restated £ million	2012 £ million	2011 £ million
Net debt	454.2	639.4	529.0	749.1
Equity	1,531.8	1,403.8	1,241.6	1,205.3
<b>Capital employed</b>	<b>1,986.0</b>	<b>2,043.2</b>	<b>1,770.6</b>	<b>1,954.4</b>
Net debt (including post tax pension deficits)	551.2	709.4		
EBITDA	576.2	489.4		
Return on invested capital	22.3%	19.4%		
Net debt (including post tax pension deficits) to EBITDA	1.0 times	1.4 times		

### 28 Provisions and contingent liabilities

#### 28a Group

	Restructuring provisions £ million	Warranty & technology provisions £ million	Other provisions restated £ million	Total restated £ million
At 1st April 2011 (restated)	47.0	22.7	14.6	84.3
Charge for year	6.6	8.2	9.4	24.2
Utilised	(33.9)	(2.0)	(2.6)	(38.5)
Released	(0.2)	(4.3)	(0.4)	(4.9)
Unwinding of discount	–	–	0.3	0.3
Exchange adjustments	(1.5)	(0.5)	(0.6)	(2.6)
<b>At 31st March 2012</b>	<b>18.0</b>	<b>24.1</b>	<b>20.7</b>	<b>62.8</b>

	2012 £ million	2011 restated £ million
Current	34.0	60.1
Non-current	28.8	24.2
<b>Total provisions</b>	<b>62.8</b>	<b>84.3</b>

The restructuring provisions relate to Environmental Technologies Division and Fine Chemicals Division and are expected to be fully spent in 2012/13.

The warranty and technology provisions represent management's best estimate of the group's liability under warranties granted and remedial work required under technology licences, based on past experience in Environmental Technologies Division. Warranties generally cover a period of up to three years.

The other provisions include environmental, onerous leases and legal provisions arising across the group. Amounts provided reflect management's best estimate of the expenditure required to settle the obligations at the balance sheet date. They are expected to be fully spent over the next seven years.

# Notes on the Accounts

for the year ended 31st March 2012

## 28 Provisions and contingent liabilities (continued)

### 28b Parent company

	Restructuring provisions £ million	Warranty provisions £ million	Other provisions £ million	Total £ million
At 1st April 2011	1.1	0.1	14.6	15.8
Charge for year	3.7	–	13.2	16.9
Utilised	(0.8)	–	(1.5)	(2.3)
Released	(0.2)	(0.1)	(0.4)	(0.7)
<b>At 31st March 2012</b>	<b>3.8</b>	<b>–</b>	<b>25.9</b>	<b>29.7</b>

	2012 £ million	2011 £ million
Current	<b>17.1</b>	2.5
Non-current	<b>12.6</b>	13.3
<b>Total provisions</b>	<b>29.7</b>	15.8

The restructuring provisions relate to Environmental Technologies Division and are expected to be fully spent in 2012/13.

The warranty provisions represent management's best estimate of the parent company's liability under warranties granted, based on past experience in Environmental Technologies Division.

The other provisions include onerous leases, legal provisions, a provision for a recharge to refund a subsidiary for its restructuring costs and provisions to buy metal to cover positions created by the parent company selling metal belonging to subsidiaries. Amounts provided reflect management's best estimate of the expenditure required to settle the obligations at the balance sheet date.

Details of guarantees given by the parent company are disclosed in note 27e.

## 29 Deferred taxation

### 29a Group

	Property, plant & equipment £ million	Post-employment benefits £ million	Provisions £ million	Inventories £ million	Intangibles £ million	Other £ million	Total deferred tax (assets) / liabilities £ million
At 1st April 2010	64.3	(64.6)	(2.8)	(45.8)	34.8	13.5	(0.6)
(Credit) / charge to income (restated)	(6.9)	3.0	(21.4)	(0.5)	(8.2)	21.4	(12.6)
Acquisitions (restated) (note 39)	0.5	–	(2.4)	(0.2)	12.6	(2.7)	7.8
Tax on items taken directly to or transferred from equity	–	27.9	–	–	–	(1.9)	26.0
Exchange adjustments	(1.4)	0.8	(0.1)	0.4	–	(0.5)	(0.8)
At 31st March 2011 (restated)	56.5	(32.9)	(26.7)	(46.1)	39.2	29.8	19.8
Charge / (credit) to income	13.3	4.9	9.0	8.4	(6.1)	(9.8)	19.7
Tax on items taken directly to or transferred from equity	–	(9.4)	–	–	–	(0.9)	(10.3)
Exchange adjustments	(0.7)	0.1	0.6	0.1	(0.6)	(0.7)	(1.2)
<b>At 31st March 2012</b>	<b>69.1</b>	<b>(37.3)</b>	<b>(17.1)</b>	<b>(37.6)</b>	<b>32.5</b>	<b>18.4</b>	<b>28.0</b>

	2012 £ million	2011 restated £ million
Deferred tax assets	<b>(25.4)</b>	(39.7)
Deferred tax liabilities	<b>53.4</b>	59.5
	<b>28.0</b>	19.8

Deductible temporary differences, unused tax losses and unused tax credits not recognised on the balance sheet are £72.5 million (2011 £72.8 million).

Deferred tax liabilities have not been recognised on temporary differences of £576.9 million (2011 £652.1 million) associated with investments in subsidiaries.

## Notes on the Accounts

for the year ended 31st March 2012

### 29 Deferred taxation (continued)

#### 29b Parent company

	Property, plant & equipment £ million	Post- employment benefits £ million	Provisions £ million	Inventories £ million	Intangibles £ million	Other £ million	Total deferred tax (assets) / liabilities £ million
At 1st April 2010	24.1	(43.9)	(0.3)	(37.9)	1.1	7.8	(49.1)
(Credit) / charge to income	(3.6)	5.7	0.1	1.6	–	2.9	6.7
Tax on items taken directly to or transferred from equity	–	23.8	–	–	–	(1.3)	22.5
At 31st March 2011	20.5	(14.4)	(0.2)	(36.3)	1.1	9.4	(19.9)
(Credit) / charge to income	(0.1)	3.6	0.2	8.4	(0.4)	(2.4)	9.3
Tax on items taken directly to or transferred from equity	–	(4.0)	–	–	–	0.4	(3.6)
<b>At 31st March 2012</b>	<b>20.4</b>	<b>(14.8)</b>	<b>–</b>	<b>(27.9)</b>	<b>0.7</b>	<b>7.4</b>	<b>(14.2)</b>

Deductible temporary differences, unused tax losses and unused tax credits not recognised on the balance sheet are £4.0 million (2011 £4.0 million).

### 30 Share capital

	Number	£ million
<b>Issued and fully paid ordinary shares of £1 each</b>		
At 1st April 2010, 31st March 2011 and 31st March 2012	220,673,613	220.7

Details of outstanding share options and allocations under the company's long term incentive plan which have yet to mature are disclosed in note 13.

At the last annual general meeting on 19th July 2011 shareholders approved a resolution for the company to make purchases of its own shares up to a maximum number of 21,467,573 shares. The resolution remains valid until the conclusion of this year's annual general meeting. The company will purchase its own shares when the board believes it to be in the best interests of the shareholders generally and will result in an increase in earnings per share.

The group and parent company's employee share ownership trust (ESOT) also buys shares on the open market and holds them in trust for employees participating in the group's executive share option schemes and long term incentive plan. At 31st March 2012 the ESOT held 2,508,723 shares (2011 1,995,144 shares) which had not yet vested unconditionally in employees. Computershare Trustees (CI) Limited, as trustee for the ESOT, has waived its dividend entitlement.

The total number of treasury shares held was 5,997,877 (2011 5,997,877) at a total cost of £91.7 million (2011 £91.7 million).

### 31 Components of other comprehensive income

	2012 £ million	2011 restated £ million
Cash flow hedges:		
Gains taken to equity	8.3	4.4
Transferred to income statement	(2.2)	(0.7)
	6.1	3.7
Currency translation differences:		
Taken to equity	(53.7)	(8.9)
	(53.7)	(8.9)

# Notes on the Accounts

for the year ended 31st March 2012

## 32 Tax effects relating to other comprehensive income

	2012	2011				
	Before tax	Tax	Net of tax	Before tax restated	Tax	Net of tax restated
	£ million	£ million	£ million	£ million	£ million	£ million
Currency translation differences	(53.7)	–	(53.7)	(8.9)	(10.3)	(19.2)
Cash flow hedges	6.1	(1.4)	4.7	3.7	(1.0)	2.7
Fair value gains on net investment hedges	23.7	–	23.7	2.2	9.2	11.4
Actuarial (loss) / gain on post-employment benefits assets and liabilities	(70.6)	20.1	(50.5)	85.4	(27.9)	57.5
<b>Total other comprehensive (expense) / income</b>	<b>(94.5)</b>	<b>18.7</b>	<b>(75.8)</b>	82.4	(30.0)	52.4

## 33 Other reserves

### 33a Group

	Capital redemption reserve	Foreign currency translation restated	Hedging reserve	Total other reserves restated
	£ million	£ million	£ million	£ million
At 1st April 2010	6.5	70.0	(3.1)	73.4
Cash flow hedges:				
Gains taken to equity	–	–	4.4	4.4
Transferred to income statement	–	–	(0.7)	(0.7)
Fair value gains on net investment hedges	–	2.2	–	2.2
Currency translation differences on foreign currency net investments and related loans (restated) (note 39)	–	(8.9)	–	(8.9)
Tax on items taken directly to or transferred from equity	–	(1.1)	(1.0)	(2.1)
At 31st March 2011 (restated)	6.5	62.2	(0.4)	68.3
Cash flow hedges:				
Gains taken to equity	–	–	8.3	8.3
Transferred to income statement	–	–	(2.2)	(2.2)
Fair value gains on net investment hedges	–	23.7	–	23.7
Currency translation differences on foreign currency net investments and related loans	–	(53.7)	–	(53.7)
Tax on items taken directly to or transferred from equity	–	–	(1.4)	(1.4)
<b>At 31st March 2012</b>	<b>6.5</b>	<b>32.2</b>	<b>4.3</b>	<b>43.0</b>

### 33b Parent company

	Capital redemption reserve	Foreign currency translation	Hedging reserve	Total other reserves
	£ million	£ million	£ million	£ million
At 1st April 2010	6.5	(5.0)	(1.3)	0.2
Cash flow hedges:				
Gains taken to equity	–	–	2.6	2.6
Transferred to income statement	–	–	(2.0)	(2.0)
Currency translation differences on foreign operations	–	1.2	–	1.2
Tax on items taken directly to or transferred from equity	–	–	(0.2)	(0.2)
At 31st March 2011	6.5	(3.8)	(0.9)	1.8
Cash flow hedges:				
Gains taken to equity	–	–	8.5	8.5
Transferred to income statement	–	–	(1.8)	(1.8)
Currency translation differences on foreign operations	–	(0.1)	–	(0.1)
Tax on items taken directly to or transferred from equity	–	–	(1.6)	(1.6)
<b>At 31st March 2012</b>	<b>6.5</b>	<b>(3.9)</b>	<b>4.2</b>	<b>6.8</b>

## Notes on the Accounts

for the year ended 31st March 2012

### 34 Gross cash flows

#### 34a Purchases of non-current assets and investments

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Purchases of property, plant and equipment	137.5	119.3	33.3	27.2
Purchases of intangible assets	13.0	17.6	1.2	1.9
Purchases of available-for-sale investments	0.2	0.5	–	–
	<b>150.7</b>	<b>137.4</b>	<b>34.5</b>	<b>29.1</b>

#### 34b Purchases of businesses

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Purchase of businesses	–	52.4	–	–
Cash acquired with businesses	–	(1.0)	–	–
Consideration refunded for prior years' acquisitions	(1.6)	–	–	–
Consideration paid for prior years' acquisitions	1.0	1.7	–	–
	<b>(0.6)</b>	<b>53.1</b>	<b>–</b>	<b>–</b>

#### 34c Net cost of ESOT transactions in own shares

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Purchase of own shares by ESOT	(36.8)	(16.2)	(36.8)	(16.2)
Release of own shares by ESOT	11.1	7.1	11.1	7.1
	<b>(25.7)</b>	<b>(9.1)</b>	<b>(25.7)</b>	<b>(9.1)</b>

#### 34d (Repayment of) / proceeds from borrowings and finance leases

	Group		Parent company	
	2012 £ million	2011 restated £ million	2012 £ million	2011 £ million
Proceeds from borrowings falling due within one year	2.6	120.1	–	96.7
Repayment of borrowings falling due within one year	(168.7)	(109.1)	(146.7)	(80.9)
Proceeds from borrowings falling due after more than one year	–	85.5	–	85.5
Capital element of finance lease rental payments	(0.3)	(0.3)	(0.3)	(0.3)
	<b>(166.4)</b>	<b>96.2</b>	<b>(147.0)</b>	<b>101.0</b>

### 35 Cash and cash equivalents

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Cash and deposits	139.1	118.9	78.0	23.1
Bank overdrafts	(35.8)	(24.5)	(65.9)	(74.1)
<b>Cash and cash equivalents</b>	<b>103.3</b>	<b>94.4</b>	<b>12.1</b>	<b>(51.0)</b>

# Notes on the Accounts

for the year ended 31st March 2012

## 36 Precious metal operating leases

The group leases, rather than purchases, precious metals to fund temporary peaks in metal requirements provided market conditions allow. These leases are from banks for specified periods (typically a few months) and for which the group pays a fee. These arrangements are classified as operating leases. The group holds sufficient precious metal inventories to meet all the obligations under these lease arrangements as they fall due. At 31st March 2012 precious metal leases were £9.1 million (2011 £93.0 million).

## 37 Commitments

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
Future capital expenditure contracted but not provided	<b>20.8</b>	15.1	<b>1.4</b>	2.1
Future minimum amounts payable under non-cancellable operating leases				
Within one year	<b>17.1</b>	12.6	<b>2.3</b>	1.9
From one to five years	<b>27.9</b>	27.0	<b>6.9</b>	5.9
After five years	<b>19.4</b>	27.6	<b>8.7</b>	10.7
	<b>64.4</b>	67.2	<b>17.9</b>	18.5
Future minimum sublease payments expected to be received under non-cancellable operating leases	<b>(0.3)</b>	(0.4)	<b>(0.3)</b>	–
Future minimum amounts payable under finance leases				
Within one year	<b>0.4</b>	0.4	<b>0.4</b>	0.4
From one to five years	<b>1.8</b>	1.8	<b>1.7</b>	1.7
After five years	<b>0.2</b>	0.6	<b>0.2</b>	0.6
	<b>2.4</b>	2.8	<b>2.3</b>	2.7
Less future finance charges	<b>(0.3)</b>	(0.4)	<b>(0.3)</b>	(0.4)
Present value of finance lease obligations	<b>2.1</b>	2.4	<b>2.0</b>	2.3

The group and parent company lease some of its property, plant and equipment which are used by the group and parent company in their operations, except for leases of some property which the group and parent company no longer use which are now sublet.

## 38 Transactions with related parties

Transactions between the parent company and its subsidiaries, which are related parties, have been eliminated on consolidation and so are only disclosed for the parent company's accounts. Guarantees of subsidiaries' borrowings are disclosed in note 27e.

	Group		Parent company	
	2012 £ million	2011 £ million	2012 £ million	2011 £ million
<b>Trading transactions with subsidiaries</b>				
Sale of goods	–	–	<b>2,898.2</b>	2,131.5
Purchases of goods	–	–	<b>404.9</b>	325.6
Income from service charges	–	–	<b>16.2</b>	15.5
Amounts receivable from subsidiaries	–	–	<b>140.9</b>	120.4
Amounts payable to subsidiaries	–	–	<b>18.6</b>	16.4
Loans to subsidiaries	–	–	<b>1,074.4</b>	959.3
Loans from subsidiaries	–	–	<b>1,210.9</b>	939.9

The group had an associate, AGR Matthey, which was dissolved on 14th September 2010. During the year ended 31st March 2011 the group received £3.5 million related to the final AGR Matthey distribution of residual cash.

The group's post-employment benefits plans are related parties and the group's and parent company's transactions with them are disclosed in notes 14a and 14b respectively.

The transactions with key management personnel are described in note 12c.

# Notes on the Accounts

for the year ended 31st March 2012

## 39 Restatement of acquisition in the year ended 31st March 2011

On 1st November 2010 the group acquired 100% of Intercat, Inc. and its subsidiaries. The fair values disclosed at 31st March 2011 were provisional. These have now been finalised and the balance sheet at 31st March 2011 restated.

The net assets acquired were:

	Estimated fair value at time of acquisition £ million	Revised fair value at time of acquisition £ million	Measurement period adjustments £ million
Property, plant and equipment	11.5	11.5	–
Intangible assets – patents, trademarks and licences	10.1	8.5	(1.6)
Intangible assets – customer contracts and relationships	17.7	20.5	2.8
Intangible assets – acquired research and technology	2.8	2.8	–
Inventories	5.8	5.8	–
Trade and other receivables	5.4	5.2	(0.2)
Cash and cash equivalents	1.0	1.0	–
Current other borrowings	(21.5)	(20.5)	1.0
Trade and other payables	(10.6)	(11.0)	(0.4)
Current income tax liabilities	(1.4)	(1.8)	(0.4)
Deferred income tax liabilities	(8.0)	(7.6)	0.4
Provisions	–	(1.9)	(1.9)
Total net assets acquired	12.8	12.5	(0.3)
Goodwill on acquisition	20.2	19.4	(0.8)
Total consideration	33.0	31.9	(1.1)

As a result of these changes the amortisation of acquired intangibles for the year ended 31st March 2011 increased by £1.3 million to £14.5 million and the income tax expense decreased by £0.5 million to £75.5 million. Also the currency translation loss in other comprehensive income increased by £1.0 million to £8.9 million.

## 40 Discontinued operations

On 28th February 2007 the group sold its Ceramics Division. During the year ended 31st March 2011 further costs of £1.9 million were provided in respect of environmental warranty claims.

## 41 Key sources of estimation uncertainty

Determining the carrying amounts of some assets and liabilities requires estimation of the effects of uncertain future events on those assets and liabilities at the balance sheet date. The group and parent company have made appropriate estimates when applying the accounting policies, but the actual outcome may differ from those calculated.

The key sources of estimation uncertainty at the balance sheet date which have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

### Post-employment benefits

The group's and parent company's defined benefit plans are assessed annually by qualified independent actuaries. The details of the plans and assumptions used are described in note 14.

### Goodwill

The group has capitalised goodwill of £519.5 million and the parent company has £110.5 million. Annual impairment reviews are performed which require various assumptions. More details are given in note 16.

### Other intangible assets

Other intangible assets which are not yet being amortised are also subject to annual impairment reviews based on discounted cash flow projections. More details are given in note 17.

# Notes on the Accounts

for the year ended 31st March 2012

## 41 Key sources of estimation uncertainty (continued)

### Provisions and contingent liabilities

As described in note 28 and the accounting policies, the group and parent company measure provisions and contingent liabilities at management's best estimate of the expenditure required to settle the obligations at the balance sheet date.

### Taxation

The tax payable on profits is determined based on tax laws and regulations that apply in each of the numerous jurisdictions in which the group operates. Where the precise impact of these laws and regulations is unclear then reasonable estimates may be used to determine the tax charge included in the accounts. If the tax eventually payable or reclaimable differs from the amounts originally estimated then the difference will be charged or credited in the accounts for the year in which it is determined.

### Refining process and stock takes

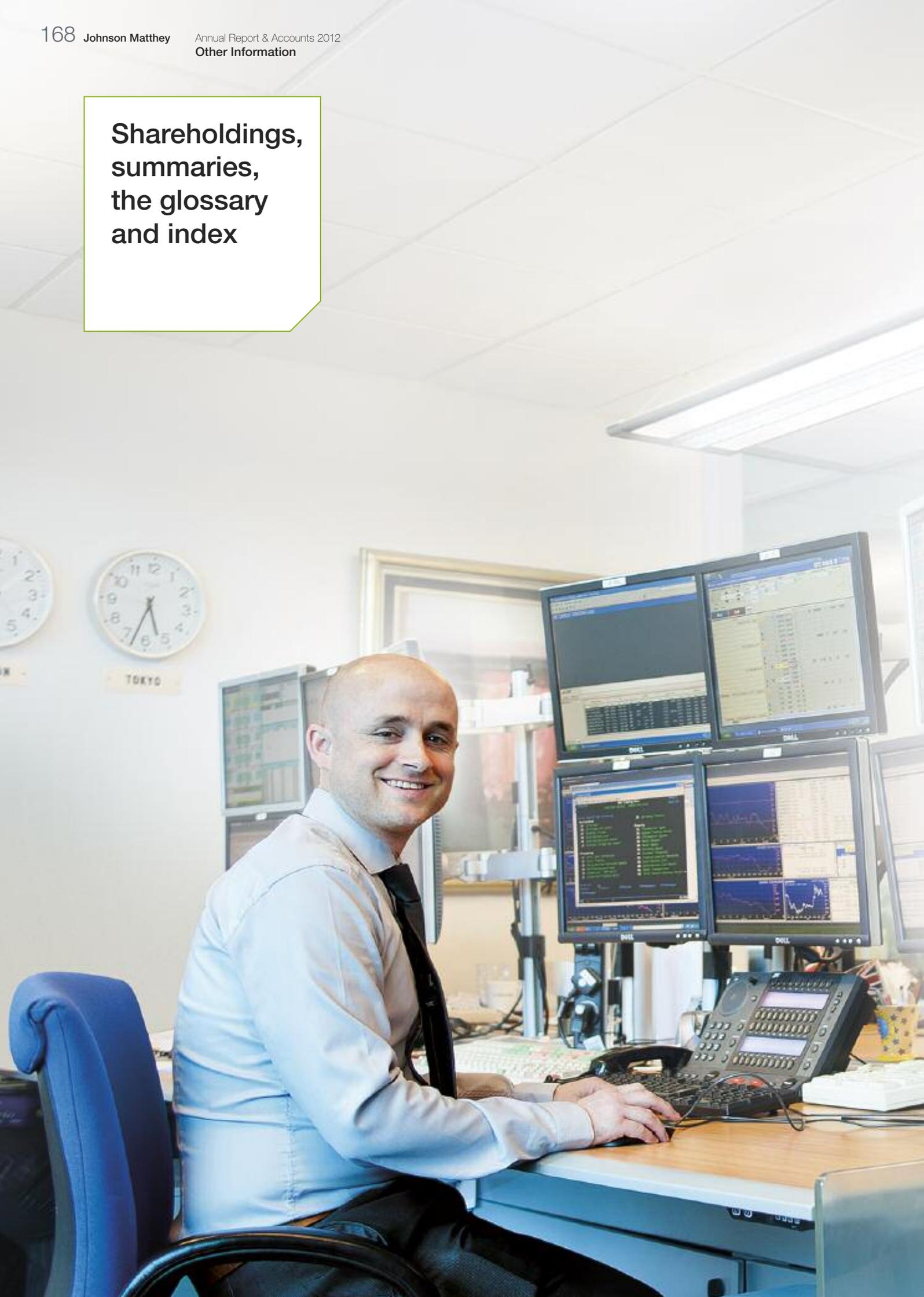
The group's and parent company's refining and fabrication businesses process significant quantities of precious metal and, similar to many industrial activities, losses may arise during processing. The extent of such losses depends on many factors, including the nature of material being refined, the specific refining processes applied and the processes' efficiency. Judgment is therefore required in estimating the amount of such losses when setting process loss provisions. In addition stock takes, particularly at the refining businesses, involve estimation of volumes in the refining system and the subsequent assaying of material to assess the precious metal content. In addition, the results of assaying and therefore the stock take itself are only available some time after the date of the stock take. In setting process loss provisions and assessing the stock take results management takes account of past experience, ability to extract precious metals from the refining process and other factors when estimating losses and gains.

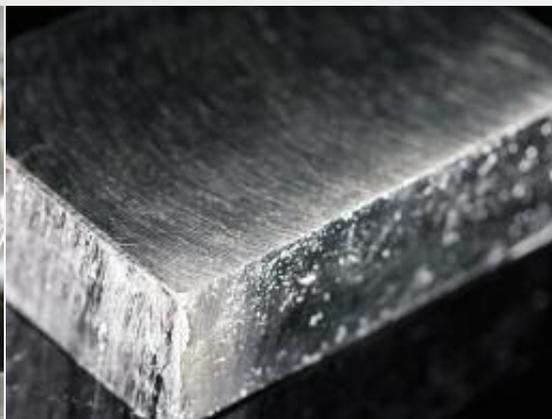
## 42 Principal subsidiaries

The group's principal subsidiaries at 31st March 2012 are set out below. Those held directly by the parent company are marked with an asterisk (\*). All the companies are wholly owned unless otherwise stated. All the subsidiaries are involved in the principal activities of the group. A full list of the group's subsidiaries will be attached to the parent company's annual return to be filed with the Registrar of Companies.

	Country of incorporation		Country of incorporation
<b>Europe</b>		<b>Asia</b>	
S.A. Johnson Matthey N.V.	Belgium	Johnson Matthey (Shanghai) Catalysts Co., Ltd	China
* Avocado Research Chemicals Limited	England	Johnson Matthey (Shanghai) Chemicals Limited	China
* Davy Process Technology Limited	England	Johnson Matthey Pacific Limited	Hong Kong
* Johnson Matthey Fuel Cells Limited (82.5%)	England	Johnson Matthey India Private Limited	India
* Tracerco Limited	England	Johnson Matthey Chemicals India Private Limited	India
Johnson Matthey SAS	France	Johnson Matthey Japan, Inc.	USA
Alfa Aesar GmbH & Co KG	Germany	* Johnson Matthey Sdn. Bhd. (92%)	Malaysia
Johnson Matthey Catalysts (Germany) GmbH	Germany	Johnson Matthey Catalysts Korea Limited	South Korea
Johnson Matthey GmbH	Germany		
Johnson Matthey DOOEL Skopje	Macedonia		
Johnson Matthey BV	Netherlands		
Macfarlan Smith Limited	Scotland		
Johnson Matthey AB	Sweden	<b>Africa</b>	
Johnson Matthey & Brandenberger AG	Switzerland	Johnson Matthey (Proprietary) Limited	South Africa
		<b>Australasia</b>	
		Johnson Matthey (Aust) Ltd	Australia
<b>North America</b>		<b>South America</b>	
The Argent Insurance Co. Limited	Bermuda	* Johnson Matthey Argentina S.A.	Argentina
Johnson Matthey Limited	Canada		
Johnson Matthey de Mexico, S.A. de C.V.	Mexico		
Johnson Matthey Inc.	USA		
Johnson Matthey Catalog Company Inc.	USA		
Johnson Matthey Fuel Cells, Inc. (82.5%)	USA		
Johnson Matthey Pharmaceutical Materials, Inc.	USA		
Intercat, Inc.	USA		

**Shareholdings,  
summaries,  
the glossary  
and index**





- Johnson Matthey is the market leader in platinum group metal fabricated products for industrial applications.

- Our platinum group metals trading team sources metal for Johnson Matthey's businesses and their customers.

- We manufacture precious metal components used in medical devices for maintaining cardiovascular health.

# Other Information

This section contains the assurance statement on our non-financial data and a checklist against the Global Reporting Initiative. It also provides further information for shareholders, a glossary and an index to help the reader locate information in the relevant sections.

## Contents

170	Five Year Record – Financial Data
171	Five Year Record – Non-Financial Data
172	Basis of Reporting – Non-Financial Data
173	Verification and Assurance – Non-Financial Data
174	Shareholder Information
176	Global Reporting Initiative (GRI) Summary
177	Glossary of Terms
178	Index
179	Financial Calendar 2012/13
180	Company Details

## Delivering Value



### → Managing Metals for Our Businesses and Our Customers

Around 70% of Johnson Matthey products and businesses involve platinum group metals (pgms) and so the sourcing of them is a vital service to our businesses and their customers. Our pgm trading team within our Precious Metals Marketing and Distribution business fulfills a key strategic function for the group, acting rather like a pgm 'treasury'. It looks after the group's metal, ensuring we remain fully hedged at all times, eliminating exposure to fluctuations in pgm prices. It also plays a crucial role in optimising the group's metal stocks making sure we have the right amount of the right type of metal in the right form, ready for our manufacturing units to make products to meet their customer orders.

The team also manages metal on behalf of our customers who may choose to deposit their own metal with us, either to fund their orders or following refining. It also sells pgms to internal and external customers and, as a result, is the world's largest supplier of pgms for physical use.

## Five Year Record – Financial Data

	2008 £ million	2009 £ million	2010 £ million	2011 £ million	2012 £ million
<b>Revenue</b>	7,498.7	7,847.8	7,839.4	9,984.8	<b>12,023.2</b>
<b>Sales excluding the value of precious metals</b>	1,750.2	1,796.9	1,885.5	2,280.3	<b>2,678.6</b>
<b>EBITDA</b>	374.1	398.1	382.7	489.4	<b>576.2</b>
Depreciation	(68.3)	(88.7)	(97.3)	(108.3)	<b>(108.5)</b>
Amortisation	(9.0)	(10.9)	(13.6)	(14.9)	<b>(17.6)</b>
<b>Underlying operating profit</b>	296.8	298.5	271.8	366.2	<b>450.1</b>
Net finance costs	(30.3)	(32.6)	(19.4)	(20.7)	<b>(24.1)</b>
Share of (loss) / profit of associate	(1.1)	2.0	1.7	–	<b>–</b>
<b>Underlying profit before tax</b>	265.4	267.9	254.1	345.5	<b>426.0</b>
Amortisation of acquired intangibles	(3.1)	(9.1)	(9.9)	(14.5)	<b>(16.7)</b>
Major impairment and restructuring charges	–	(9.4)	(11.3)	(71.8)	<b>–</b>
Dissolution of associate	–	–	(4.4)	0.1	<b>–</b>
<b>Profit before tax</b>	262.3	249.4	228.5	259.3	<b>409.3</b>
Income tax expense	(77.2)	(76.7)	(64.3)	(75.5)	<b>(93.9)</b>
Profit after taxation	185.1	172.7	164.2	183.8	<b>315.4</b>
Profit / (loss) for the year from discontinued operations	0.3	1.2	–	(1.9)	<b>–</b>
Non-controlling interests	0.8	0.2	–	(0.4)	<b>0.5</b>
Profit attributable to owners of the parent company	186.2	174.1	164.2	181.5	<b>315.9</b>
<b>Underlying earnings per ordinary share</b>	89.5p	89.6p	86.4p	119.0p	<b>153.7p</b>
<b>Earnings per ordinary share</b>	88.5p	82.6p	77.6p	85.2p	<b>148.7p</b>
<b>Dividend per ordinary share</b>	36.6p	37.1p	39.0p	46.0p	<b>55.0p</b>
<b>Summary Balance Sheet</b>					
<b>Assets employed:</b>					
Goodwill	480.4	516.0	513.8	528.7	<b>519.5</b>
Property, plant and equipment / other intangible assets	827.9	1,060.5	1,053.2	1,060.6	<b>1,037.3</b>
Non-current investments / associates	8.9	12.1	10.9	8.0	<b>8.0</b>
Inventories	380.4	371.7	390.1	556.3	<b>630.8</b>
Receivables / current investments / tax assets / financial assets	712.4	585.9	718.9	952.2	<b>898.6</b>
Payables / provisions / tax liabilities / financial liabilities	(655.7)	(684.1)	(717.0)	(932.2)	<b>(938.8)</b>
Post-employment benefits net assets / employee benefit obligations	16.4	(151.6)	(245.7)	(130.4)	<b>(169.4)</b>
	1,770.7	1,710.5	1,724.2	2,043.2	<b>1,986.0</b>
<b>Financed by:</b>					
Net debt	610.4	534.4	473.4	639.4	<b>454.2</b>
Retained earnings	879.1	849.6	837.7	1,001.2	<b>1,169.6</b>
Share capital, share premium, shares held in ESOTs and other reserves	279.8	325.7	411.7	401.5	<b>361.8</b>
Non-controlling interest	1.4	0.8	1.4	1.1	<b>0.4</b>
<b>Capital employed</b>	1,770.7	1,710.5	1,724.2	2,043.2	<b>1,986.0</b>
<b>Return on invested capital</b>	18.5%	17.1%	15.8%	19.4%	<b>22.3%</b>
(Underlying operating profit / average capital employed)					

2011 has been restated for the changes to Intercat, Inc.'s fair values. In 2009, the balance sheet for 2008 was restated for the changes to Argillon Group's fair value at acquisition and goodwill on acquisition.

## Five Year Record – Non-Financial Data

		2007 <sup>1</sup>	2009 <sup>2</sup>	2010 <sup>2</sup>	2011 <sup>2</sup>	2012 <sup>2</sup>
<b>Social</b>						
Average employee numbers		8,013	8,742	8,575	9,388	<b>9,914</b>
Total employee turnover <sup>3</sup>	%	9.9	12.7	10.0	8.5	<b>11.7</b>
Voluntary employee turnover <sup>3</sup>	%	7.6	6.4	5.4	5.6	<b>6.4</b>
Employee gender (female)	%	22 <sup>4</sup>	22 <sup>5</sup>	21 <sup>5</sup>	22 <sup>5</sup>	<b>22<sup>5</sup></b>
New recruits gender (female)	%	25	29	25	23	<b>25</b>
Trade union representation	%	34	34	33	38	<b>35</b>
Training days per employee		3.9	2.6	2.3	2.6	<b>3.1</b>
Training spend per employee <sup>6</sup>	£	327	346	291	390	<b>335</b>
Internal promotions	% of all recruitment in year	29	38	35	33	<b>35</b>
Attendance	days lost per employee	5.2	5.3	5.2	5.2	<b>5.0</b>
Sickness absence rate	%	2.1	2.2	2.1	2.1	<b>2.0</b>
Charitable donations	£ thousands	415 <sup>2</sup>	495	458	517	<b>645</b>
<b>Health and Safety</b>						
Greater than three day accidents	per 1,000 employees	3.04	5.09	2.48	2.99 <sup>7</sup>	<b>2.07</b>
Total lost time accidents		78	95	60 <sup>7</sup>	74 <sup>7</sup>	<b>55</b>
Total accident rate	per 1,000 employees	9.36	10.83	7.11	7.89 <sup>7</sup>	<b>5.69</b>
Total lost time accident incident rate	per 100,000 hours worked	0.50	0.53	0.36	0.40 <sup>7</sup>	<b>0.28</b>
Total days lost	per 1,000 employees	85	124	64	102	<b>90</b>
Occupational illness cases	per 1,000 employees	5.8	5.5	5.2	3.5	<b>3.5</b>
<b>Environment</b>						
Energy consumption	thousands GJ	3,787	4,070	4,001	4,749	<b>4,726</b>
Total global warming potential	thousands tonnes CO <sub>2</sub> equivalent	390	372	377	415	<b>417</b>
Total acid gas emissions	tonnes SO <sub>2</sub> equivalent	416	334	335	318	<b>444</b>
Total NOx emissions	tonnes	448	439	434	393	<b>566</b>
Total SO <sub>2</sub> emissions	tonnes	31.8	25.8	31.0	43.0	<b>47.5</b>
Total VOC emissions	tonnes	207.1	209.1	180.8	185.7	<b>189.8</b>
Total waste	tonnes	98,764	96,287	90,308	113,671	<b>120,363</b>
Total waste to landfill	tonnes	20,977	5,535	5,071	6,165	<b>10,708</b>
Packaging waste recycled – steel	tonnes	*	2,084	1,863	1,847	<b>2,314</b>
Packaging waste recycled – paper	tonnes	*	486	250	258	<b>704</b>
Packaging waste recycled – plastic	tonnes	*	648	396	439	<b>1,148</b>
Packaging waste recycled – wood	tonnes	*	1,811	828	896	<b>3,003</b>
Water consumption	thousands m <sup>3</sup>	2,048	1,951	1,750	2,076	<b>2,201</b>
Emissions to water	tonnes	360	376	236	251	<b>260</b>

<sup>1</sup> Calendar year (unless otherwise stated).

<sup>2</sup> Financial year (unless otherwise stated).

<sup>3</sup> Calculated by reference to the total number of leavers during the year expressed as a percentage of the average number of people employed during the year. Does not include agency workers not directly employed by Johnson Matthey.

<sup>4</sup> At 31st December.

<sup>5</sup> At 31st March.

<sup>6</sup> Does not include the cost of in house training or the cost of employees' wages during training.

<sup>7</sup> Restated.

\* Not measured.

## Basis of Reporting – Non-Financial Data

Johnson Matthey has adopted a framework based upon the GRI G3 sustainability reporting guidelines and applied them in an appropriate context to the group by examination of the definition, explanation notes and self diagnosis tests to ensure a comprehensive, accurate and complete account when assessed against the reporting criteria. In addition, feedback received on the 2010/11 Sustainability Report, recommendations on that report arising from the assurance process and a well structured management approach early in 2012 have shaped the reporting of non-financial content and context. Due consideration has been given to new international standards such as the International Organization for Standardization's voluntary standard on 'social responsibility', ISO 26000.

This report has been developed to incorporate the group's significant economic, environmental and social impacts and set within the context of the United Nations Brundtland definition of sustainability (1987) and our own Sustainability 2017 goals. Understanding the relevance of local, national, regional and global issues, regulation and legislation is taken into account when considering reporting. The AA1000AS principles of inclusivity, materiality and responsiveness are central to the structure of the report and in setting priorities for reporting.

There are no limitations on the scope or boundary of the non-financial data in this report. The non-financial information presented covers the sustainability activities and performance of Johnson Matthey's global operations and includes the parent company and its subsidiaries (as listed on page 167). Environmental performance data covers manufacturing, research and warehousing operations of the parent company and its subsidiaries (and environmental performance data from new facilities is included from the point at which the facility is fully operational). The report also explains how we are continuing to build sustainability into our business planning and decision making processes and how through our governance processes, we manage social, environmental and ethical matters across the group.

Data measurement techniques, including calculations for social, environmental and health and safety performance, have used internationally recognised protocols such as the greenhouse gas protocol and the GRI indicator protocols as appropriate. Any exceptions are noted.

All non-financial performance data is reported on a financial year basis unless otherwise stated. Where necessary data has been restated, for example to reflect changes in the business (e.g. divestments and site closures), to take account of changes in best practice methodologies for reporting, changes in calculating emissions or in response to recommendations made by our assurance provider. For employee data, percentage calculations are made in relation to the number of permanent employees in the group (unless otherwise stated).

Global warming potential (GWP) in tonnes of carbon dioxide (CO<sub>2</sub>) equivalent includes Scope 1 and Scope 2 emissions. We report greenhouse gas emissions from process and energy use and convert the total group energy use to tonnes CO<sub>2</sub> equivalent using national and regional conversion factors for each emissions source as appropriate.

Certain employee data is included in the accounts which is subject to external audit. The group's other social, health and safety and environmental data is collected annually at a group level. The data is collated through five questionnaires based on the requirements of the Global Reporting Initiative third generation (GRI G3) guidelines. It is completed by businesses and signed off by the general manager for each global operation. The reported site level data is a combination of actual measurement and estimates. The processes in place to internally verify the reported data are described in the Verification and Assurance section on page 173.

### Accident Calculation Definitions

Johnson Matthey's definition of an accident for the purposes of this report is any acute unplanned event that causes harm to individuals, making them unable to attend work on days after the date of the event. Accidents are further subdivided into accidents that result in more than three days' work lost and those that cause three or less days to be lost. Accident incidence rates are calculated based on the rate of these accidents per 1,000 employees.

The following metrics are used in this report:

**Incidence rate for all lost time accidents in the year** = (number of greater than three day accidents in the year + number of three day or less accidents in the year) x 1,000 ÷ (average number of employees in the year).

**Incidence rate for greater than three day accidents in the year** = (number of greater than three day accidents in the year) x 1,000 ÷ (average number of employees in the year).

**Lost work days per 1,000 employees per year** = (total lost work days in year) x 1,000 ÷ (average number of employees in the year).

**Frequency rate for all lost time accidents in the year** = (number of greater than three day accidents in the year + number of three day or less accidents in the year) x 100,000 ÷ (number of hours worked in the year).

## Verification and Assurance – Non-Financial Data

### Verification

The board reviews corporate social responsibility issues as part of its risk management process. The board believes that the measures taken to review the non-financial information provide a suitable level of confidence.

Certain human resources data forms part of Johnson Matthey's accounts which are subject to external audit. Other human resources data, community investment data and information relating to charitable donations is reviewed and verified by internal experts.

Health and safety data is reviewed by group health and safety experts and as part of the group environment, health and safety (EHS) audit programme. Environmental data is reviewed by group environmental experts and as part of the group EHS audit programme.

All data is reviewed by internal sustainability experts and at appropriate levels of management up to and including the Chief Executive's Committee.

Johnson Matthey utilises external specialists on specific sustainability issues. Over the past year this has included external audits or reviews of people management systems, health and safety (OHSAS 18001) and environmental management systems (ISO 14001).

### Assurance

Johnson Matthey commissioned Corporate Citizenship to provide external assurance and commentary on the company's sustainability reporting, comprising the non-financial aspects of this year's annual report and related content on the company's website. Johnson Matthey has chosen to use the AA1000 assurance standard, AA1000AS (2008), as the reference standard for this year's assurance.

Corporate Citizenship has evaluated the nature and extent of adherence to the AA1000AS principles of inclusivity, materiality and responsiveness, as well as the quality of Johnson Matthey's sustainability performance reporting. The criteria used to assure the sustainability performance data were the GRI G3 Principles for Defining Report Quality and the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (Revised Edition) for greenhouse gas reporting.

Based on the work undertaken, Corporate Citizenship has concluded that Johnson Matthey's sustainability reporting, as outlined above, reflects the principles of AA1000 (2008): inclusivity, materiality and responsiveness. A full version of Corporate Citizenship's AA1000 Assurance Statement, which includes opinions on Johnson Matthey's adherence to each AA1000AS principle, as well as detailed assurance commentary, is available online at [www.matthey.com/AR12](http://www.matthey.com/AR12).

### Corporate Citizenship

London  
31st May 2012

[www.corporate-citizenship.com](http://www.corporate-citizenship.com)

# Shareholder Information

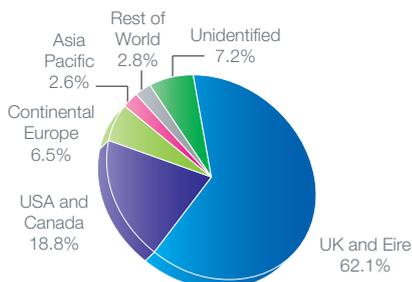
## Johnson Matthey Share Price Five Year Performance versus FTSE 100



## Johnson Matthey Share Price as at 31st March

2007	2008	2009	2010	2011	2012
1,576p	2,005p	1,053p	1,746p	1,860p	2,359p

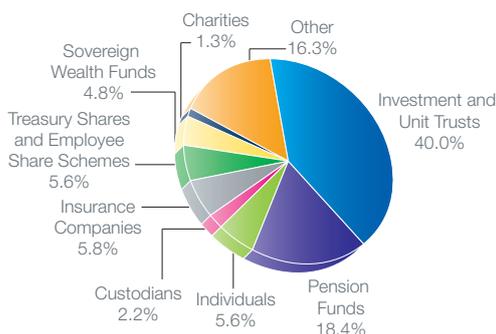
### By Location



## Analysis of Ordinary Shareholders as at 30th April 2012

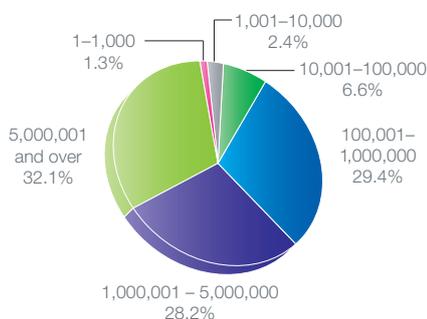
By location	Number of shares	Percentage
UK and Eire	137,068,645	62.1
USA and Canada	41,367,358	18.8
Continental Europe	14,413,317	6.5
Asia Pacific	5,661,015	2.6
Rest of World	6,234,586	2.8
Unidentified	15,928,692	7.2
<b>Total</b>	<b>220,673,613</b>	<b>100.0</b>

### By Category



By category	Number of shares	Percentage
Investment and Unit Trusts	88,209,841	40.0
Pension Funds	40,531,222	18.4
Individuals	12,413,466	5.6
Custodians	4,901,473	2.2
Insurance Companies	12,725,066	5.8
Treasury Shares and Employee Share Schemes	12,360,631	5.6
Sovereign Wealth Funds	10,581,533	4.8
Charities	2,919,122	1.3
Other	36,031,259	16.3
<b>Total</b>	<b>220,673,613</b>	<b>100.0</b>

### By Size of Holding



By size of holding	Number of holdings	Percentage	Number of shares	Percentage
1 – 1,000	7,660	73.8	2,828,568	1.3
1,001 – 10,000	2,038	19.7	5,185,109	2.4
10,001 – 100,000	429	4.1	14,612,223	6.6
100,001 – 1,000,000	211	2.0	64,944,375	29.4
1,000,001 – 5,000,000	30	0.3	62,314,276	28.2
5,000,001 and over	8	0.1	70,789,062	32.1
<b>Total</b>	<b>10,376</b>	<b>100.0</b>	<b>220,673,613</b>	<b>100.0</b>

# Shareholder Information

## Share Dealing Services

A telephone and internet dealing service for UK shareholders is provided by the company's registrars, Equiniti. For further information, including Equiniti's terms and conditions and details of their fees, log on to [www.shareview.co.uk/dealing](http://www.shareview.co.uk/dealing) or call 08456 037 037.

## Dividend History – Pence per Share

	2008	2009	2010	2011	2012
Interim	10.6	11.1	11.1	12.5	15.0
Final	26.0	26.0	27.9	33.5	40.0
<b>Total</b>	<b>36.6</b>	<b>37.1</b>	<b>39.0</b>	<b>46.0</b>	<b>55.0</b>

## Dividend Policy

It is Johnson Matthey's policy to grow ordinary dividends over time, broadly in line with underlying earnings per share while maintaining dividend cover at about two and a half times to ensure sufficient funds are retained to support organic growth. Over the last five years from 2007/08, underlying earnings per share have grown at a compound annual growth rate of 14.5% p.a. The board is proposing a final dividend for 2011/12 of 40.0 pence to take the total for the year to 55.0 pence, which is 20% up. The dividend will be covered 2.8 times by underlying earnings.

## Dividend Payments and DRIP

Dividends can be paid directly into shareholders' bank or building society accounts. Shareholders wishing to take advantage of this facility should contact the company's registrars, Equiniti, or complete the dividend mandate form attached to their dividend cheque.

A Dividend Reinvestment Plan (DRIP) is also available which allows shareholders to purchase additional shares in the company. Further information can be obtained from Equiniti, Aspect House, Spencer Road, Lancing, West Sussex BN99 6DA. Telephone 0871 384 2268\*. They can also be contacted via their website at [www.shareview.co.uk](http://www.shareview.co.uk).

## American Depositary Receipts

Johnson Matthey has a sponsored Level 1 American Depositary Receipt (ADR) programme which BNY Mellon administers and for which it acts as Depositary. Each ADR represents two Johnson Matthey ordinary shares. The ADRs trade on the US over-the-counter (OTC) market under the symbol JMPLY. When dividends are paid to shareholders, the Depositary converts such dividends into US dollars, net of fees and expenses, and distributes the net amount to ADR holders. For enquiries, BNY Mellon can be contacted on 1-888-BNY-ADRS (1-888-269-2377) toll free if you are calling from within the United States. Alternatively, they can be contacted by e-mail at [shrrelations@bnymellon.com](mailto:shrrelations@bnymellon.com) or via their website at [adrbnymellon.com](http://adrbnymellon.com).

## Share Price and Group Information

Information on the company's current share price together with copies of the group's annual and half-yearly reports and major presentations to analysts and institutional shareholders are available on the Johnson Matthey website: [www.matthey.com](http://www.matthey.com).

The website's Investor Relations section contains extensive information and a number of tools which will be of assistance to investors including historic share price information downloads and a share price charting facility.

For capital gains tax purposes the mid-market price of the company's ordinary shares on 31st March 1982 was 253 pence.

## Enquiries

Shareholders who wish to contact Johnson Matthey Plc on any matter relating to their shareholding are invited to contact the company's registrars, Equiniti, Aspect House, Spencer Road, Lancing, West Sussex BN99 6DA. Telephone 0871 384 2344\* or via their website [www.shareview.co.uk](http://www.shareview.co.uk).

Shareholders may also telephone the company on 020 7269 8400 or write to:

The Company Secretary  
Johnson Matthey Plc  
5th Floor  
25 Farringdon Street  
London  
EC4A 4AB

For other enquiries shareholders may contact the Director, Investor Relations and Corporate Communications at the above address and telephone number.

\* Calls to these numbers are charged at 8p per minute from a BT landline. Other telephony providers' costs may vary. Lines are open 8.30am to 5.30pm Monday to Friday.

## Global Reporting Initiative (GRI) Summary

This summary outlines where to find information in this report on the GRI core and additional indicators and topics relevant to the International Organization for Standardization (ISO) standard on social responsibility (ISO 26000) standard core subject areas. The complete GRI Index can be found online at [www.matthey.com/AR12](http://www.matthey.com/AR12).

ISO 26000 Standard Core Subject Areas	GRI Indicator	Subject	Page
	<b>Strategy and Profile</b>		
	1.1	Chief Executive's Statement	6-7
	1.2	Key impacts, risks and opportunities	13-15, 20-23, 79-81
	2.1 – 2.10	Organisational profile	inner flap, 10, 26-42, 52, 102, 123, 166-167, 174, 180
	3.1 – 3.4	Report parameters	172, 180
	3.5 – 3.13	Report scope, boundary and assurance	20-23, 50, 79-81, 127-130, 172-173, 176
Organisational governance	4.1 – 4.10	Corporate governance	16-17, 50, 78-117
	4.11 – 4.13	Commitments to external initiatives	58, 60-61, 67, 80
	4.14 – 4.17	Stakeholder engagement	48-59
	<b>Economic Performance</b>		
	Management approach		12-15
	EC1	Direct economic value generated and distributed	16-17, 24-47, 58, 104, 136-138
	EC2	Financial implications due to climate change	13, 22-23, 29, 38, 45, 68
	EC3	Coverage of the organisation's defined benefit plan obligations	140-147
	EC4	Significant financial assistance received from government	104
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit	56-58
	<b>Environmental Performance</b>		
The environment	Management approach		70-75
	EN3, EN4	Energy	71
	EN8	Water	73-75
	EN16, EN17, EN20	Emissions	71-73
	EN21	Wastewater	73-74
	EN22	Waste	72-74
	EN23	Significant spills	74
	EN24	Hazardous waste	72
	EN28	Compliance	71
	<b>Social Performance – Labour Practices</b>		
Labour practices	Management approach		50-56, 62-64, 80-81
	LA1, LA2, LA4	Employment	52-56
	LA7	Occupational health and safety	53, 62-64
	LA10	Training and education	53-55
	<b>Social Performance – Human Rights</b>		
Human rights	Management approach		81
	HR1	Significant investment agreements	80
	HR6, HR7	Child labour, forced labour, compulsory labour	80
	HR11	Grievances addressed and resolved	80
	<b>Social Performance – Society</b>		
Fair operating practices / community involvement and development	Management approach		50, 56, 81
	SO1	Community	56-59
	SO2, SO3	Corruption	20-23, 80, 97-98
	SO6	Political contributions	104
	<b>Social Performance – Product Responsibility</b>		
Consumer (customer) issues	Management approach		64-66
	PR1	Customer health and safety	64-66
	PR2, PR4, PR9	Compliance	65

Johnson Matthey continues to develop sustainability metrics and reporting criteria in alignment with those developed by the Global Reporting Initiative (GRI). More information on the GRI Reporting Framework can be found at [www.globalreporting.org](http://www.globalreporting.org).

This report has been prepared according to the latest version of the GRI Sustainability Reporting Guidelines (G3.1) and has been reviewed by Corporate Citizenship as part of the external assurance process in which they used the AA1000AS assurance standards as described on page 173. This third party assurance of the report and disclosures allows Johnson Matthey to self declare a GRI B+ level.

## Glossary of Terms

AA1000AS	An assurance standard for sustainability and corporate responsibility reporting	HSRG	Health Science Research Group
ABI	Association of British Insurers	IAS	International Accounting Standard
ADDERALL XR®	An extended release product used in the treatment of Attention Deficit Hyperactivity Disorder	IASB	International Accounting Standards Board
ADHD	Attention deficit hyperactivity disorder	ICCA	International Council of Chemical Associations
ADR	American Depositary Receipt	IFRIC	International Financial Reporting Interpretations Committee
AGM	Annual general meeting	IFRS	International Financial Reporting Standards
Alfa Aesar	Brand name of Johnson Matthey's Research Chemicals business	Interest cover	Underlying operating profit / net finance costs
AMOG	Ammonia, Methanol, Oil and Gas	IP	Intellectual property
APB	Auditing Practices Board	IPA	International Platinum Group Metals Association
API	Active pharmaceutical ingredient	ISO 14000	Internationally recognised series of standards which specify the requirements for an environmental management system
Bitrex®	The world's bitterest substance which is added to household cleaning products to prevent accidental swallowing	ISO 26000	International standard giving guidelines on social responsibility
CEC	Chief Executive's Committee	ISO 9000	Internationally recognised series of standards which specify the requirements for a quality management system
CGU	Cash-generating unit	JMEPS	Johnson Matthey Employees Pension Scheme
CHP	Combined heat and power	KPI	Key performance indicator
CIA	Chemical Industries Association	LBG	London Benchmarking Group
CO <sub>2</sub>	Carbon dioxide	LCA	Life cycle assessment
COD	Chemical oxygen demand	LTIP	Long term incentive plan
CPI	Consumer price index	MDRC	Management Development and Remuneration Committee
CRC	UK government's Carbon Reduction Commitment	MEA	Membrane electrode assembly
CSR	Corporate social responsibility	N <sub>2</sub> O	Nitrous oxide
DPF	Diesel particulate filter	NGO	Non-governmental organisation
DPT	Davy Process Technology	NOx	Oxides of nitrogen
DRIP	Dividend Reinvestment Plan	OEM	Original equipment manufacturer
EBITDA	Earnings before interest, tax, depreciation and amortisation	PBT	Profit before tax
ECT	Emission Control Technologies	Pgm	Platinum group metal
EHS	Environment, health and safety	PMPD	Precious Metal Products Division
EIB	European Investment Bank	PRM	Process risk management
EPS	Earnings per share	R&D	Research and development
ERT	Electrical resistance tomography	REACH	Registration, Evaluation and Authorisation of Chemicals. EU chemical control legislation which came into force in June 2007
ESOT	Employee Share Ownership Trust	ROIC	Return on invested capital
ETF	Exchange Traded Fund	RPI	Retail price index
EU	European Union	SAICM	Strategic Approach to International Chemicals Management
EU ETS	European Union Emission Trading Scheme	SCR	Selective catalytic reduction
FRC	Financial Reporting Council	SERP	Supplemental Executive Retirement Plan
FSA's DTR	The UK Financial Services Authority's Disclosure and Transparency Rules	SIC	Standing Interpretations Committee
Fuel cell	Technology which converts hydrogen or other fuels (methanol, natural gas) into clean electricity	SIP	Share incentive plan
GHS	Globally Harmonised System of Classification and Labelling of Chemicals	SNG	Substitute natural gas
GRI	Global Reporting Initiative	SO <sub>2</sub>	Sulphur dioxide
Group Control Manual	The group's compendium of policies, procedures and rules which is distributed to all group operations	SSNMR	Solid state nuclear magnetic resonance, a spectroscopy technique
GTL	Gas to liquids, multi stage catalytic process used to convert, for example, stranded natural gas into sulphur free hydrocarbons, including diesel fuel	Syngas, synthesis gas	A mixture of hydrogen and carbon oxides
GWP	Global warming potential	The Code	The UK Corporate Governance Code, issued by the Financial Reporting Council in June 2010
HDD	Heavy duty diesel	TSCA	Toxic Substances Control Act
HR	Human resources	UK CLG	Prince of Wales's Corporate Leaders Group
		VCM	Vinyl chloride monomer
		VOC	Volatile organic compound

# Index

	Page		Page
Accounting Policies	127-130	Group Performance Review	16-17
Amortisation of acquired intangibles (note 4)	133	Group Strategy	12-15
Assurance – non-financial data	173	Guarantees (note 27)	159
Audit Committee Report	106-107	Health and Safety	60-67
Audit fees (note 5)	134	Human resources policies	81
Auditor's report	121	Income statement	122
Balance sheets	123	Intangible assets (note 17)	151-152
Basis of Reporting – Non-Financial Data	172	Inventories (notes 6, 20)	134, 153
Board of Directors	82-83	Investments in available-for-sale assets (note 19)	152
Borrowings (note 24)	154	Johnson Matthey at a Glance	inner flap
Business integrity and ethics	80	Johnson Matthey – our business	10-11
Business Review	inner cover-75	Key management personnel (note 12)	138
Capital expenditure by segment (note 1)	131-132	Key Performance Indicators	18-19
Capital expenditure to depreciation	45	Key sources of estimation uncertainty (note 41)	166-167
Capital structure and management (and note 27f)	46, 160	Liquidity and Going Concern	47
Cash and cash equivalents (note 35)	164	Long term contracts (note 23)	154
Cash flow hedges transferred to income (note 6)	134	Major impairment and restructuring charges (note 3)	133
Cash flow statements (and note 34)	45, 124, 164	Net debt (note 24)	154
Chairman's Statement	6-7	Nomination Committee Report	105
Chief Executive's Statement	8-9	Non-controlling interests	125
Corporate Governance Code Compliance	85	Operating leases (note 6, 36, 37)	134, 165
Commitments (note 37)	165	Operating profit (note 6)	134
Community investment and charitable programmes	56-58	Other reserves (note 33)	163
Company Details	180	Outlook	9
Comprehensive income (and notes 31, 32)	122, 162-163	Payables (note 22)	153
Contingent liabilities (note 28)	160-161	Pensions and other post-employment benefits (and note 14)	45, 140-147
Corporate Governance Report	84-99	Performance Highlights	inner cover
Deferred tax (notes 9, 29)	135, 161-162	Precious metal operating leases (note 36)	165
Depreciation and amortisation (note 6)	134	Precious Metal Products Division	34-39
Directors' report	inner cover-117	Property, plant and equipment (note 15)	148-149
Discontinued operations (note 40)	166	Provisions (note 28)	160-161
Dividends (and note 10)	45, 136	Receivables (note 21)	153
Earnings per ordinary share (and note 11)	45, 136-137	Related parties (note 38)	165
Employee numbers and expense (note 12)	137	Remuneration Report	108-117
Employee share ownership trust (ESOT) (note 30)	162	Research and development (and note 6)	14-15, 134
Employment policies	81	Responsibility of Directors	120
Environmental Technologies Division	26-33	Restatement of acquisition (note 39)	166
Environment	68-75	Return on invested capital	44
Environment, health and safety policies and systems	80-81	Revenue analysis (note 2)	133
Equity	125-126	Risks and Uncertainties	20-23
Finance costs / income (notes 7, 8)	135	Segmental information (note 1)	131-133
Finance leases (notes 24, 37)	154, 165	Share-based payments (note 13)	138-139
Financial assets (note 25)	155	Share capital (note 30)	162
Financial Calendar	179	Shareholder Information	174-175
Financial liabilities (note 26)	155	Social performance	48-59
Financial Review	43-46	Stakeholder engagement	50-51
Financial Review of Operations	26-42	Standards adopted in year	130
Financial risk management (and note 27)	47, 155-160	Standards not yet applied	130
Fine Chemicals Division	40-42	Statement of changes in equity	125-126
Five Year Record – Financial Data	170	Statutory information	100-104
Five Year Record – Non-Financial Data	171	Subsidiaries (notes 18, 42)	152, 167
Foreign exchange gains and losses (note 6)	134	Supply chain management	80
Global Reporting Initiative (GRI) Summary	176	Sustainability	13-15, 17, 79-81
Glossary of Terms	177	Taxation (and notes 9, 29)	44-45, 135, 161-162
Going Concern	47	Treasury Policies	47
Goodwill (note 16)	150-151	Verification and Assurance – Non-Financial Data	173
Governance	76-117		
Grants (note 6)	134		

# Financial Calendar 2012/13

## 2012

### 25th July

121st Annual General Meeting (AGM)

### 1st August

Ex dividend date (final dividend)

### 3rd August

Record date (final dividend, special dividend and share consolidation)

### 6th August

Ex dividend date (special dividend)

Share consolidation takes effect (subject to approval at the AGM)

### 17th August

Payment of final dividend and special dividend (subject to declaration at the AGM)

### 21st November

Announcement of results for the six months ending 30th September 2012

### 28th November

Ex dividend date

### 30th November

Interim dividend record date

## 2013 (provisional)

### 5th February

Payment of interim dividend

### 6th June

Announcement of results for the year ending 31st March 2013

### 12th June

Ex dividend date

### 14th June

Final dividend record date

### 25th July

122nd AGM

### 6th August

Payment of final dividend subject to declaration at the AGM

## Company Details

### Registered Office

5th Floor  
25 Farringdon Street  
London EC4A 4AB  
Telephone: +44 (0)20 7269 8400  
Fax: +44 (0)20 7269 8433  
Internet address: [www.matthey.com](http://www.matthey.com)  
E-mail: [jmp@matthey.com](mailto:jmpr@matthey.com)

Registered in England – Number 33774

### Professional Advisers

#### Auditor

KPMG Audit Plc  
15 Canada Square  
London E14 5GL

#### Brokers

Merrill Lynch International  
2 King Edward Street  
London EC1A 1HQ

J. P. Morgan Cazenove  
25 Bank Street  
Canary Wharf  
London E14 5JP

#### Lawyers

Herbert Smith LLP  
Exchange House  
Primrose Street  
London EC2A 2HS

Taylor Wessing LLP  
5 New Street Square  
London EC4A 3TW

#### Registrars

Equiniti  
Aspect House  
Spencer Road  
Lancing  
West Sussex BN99 6DA  
Telephone: 0871 384 2344\*  
Internet address: [www.shareview.co.uk](http://www.shareview.co.uk)

\* Calls to this number are charged at 8p per minute from a BT landline. Other telephony providers' costs may vary.  
Lines are open 8.30am to 5.30pm Monday to Friday.

Johnson Matthey is grateful to the following for their help in providing illustrations:

Fruits, page 65 – © Ene | Dreamstime.com

The paper in this report contains material sourced from responsibly managed forests, certified in accordance with the FSC® (Forest Stewardship Council) and is totally recyclable and acid-free.

Fulmar Colour is FSC certified, PEFC certified and ISO 14001 certified showing that it is committed to all round excellence and improving environmental performance is an important part of this strategy. Fulmar Colour aims to reduce at source the effect its operations have on the environment and is committed to continual improvement, prevention of pollution and compliance with any legislation or industry standards.

Fulmar Colour is a Carbon Neutral Printing Company.

Designed and produced by **MAGEE**

[www.magee.co.uk](http://www.magee.co.uk)

Printed by Fulmar Colour



responsibility

innovation

research

global

opportunities



**Johnson Matthey**

5th Floor  
25 Farringdon Street  
London EC4A 4AB  
United Kingdom  
Tel: +44 (0)20 7269 8400  
Fax: +44 (0)20 7269 8433

sustainable

teamwork

superior value

solutions

strategy

integrity

investment

people

science

**Go Online**

[www.matthey.com](http://www.matthey.com)

To view our online annual report