Accounts

Contents

The Accounts include the consolidated and parent company accounts and related notes, prepared in accordance with International Financial Reporting Standards, as well as the independent auditor's report.

Accounts

Consolidated Income Statement

for the year ended 31st March 2018

	Notes	2018 £ million	2017 £ million
Revenue	1,2	**14,122**	12,031
Cost of sales		**(13,214)**	(11,169)
Gross profit		**908**	862
Distribution costs		**(123)**	(124)
Administrative expenses		**(260)**	(225)
Loss on disposal of businesses	5	**(7)**	–
Loss on significant legal proceedings	6	**(50)**	–
Amortisation of acquired intangibles	7	**(19)**	(20)
Major impairment and restructuring charges	8	**(90)**	–
Operating profit	1,9	**359**	493
Finance costs	11	**(43)**	(38)
Finance income	11	**5**	7
Share of loss of joint venture and associate		**(1)**	–
Profit before tax		**320**	462
Income tax expense	12	**(22)**	(77)
Profit for the year		**298**	385
Attributable to:			
Equity shareholders		**298**	386
Non-controlling interests		**–**	(1)
		298	385

	Notes	pence	pence
Earnings per ordinary share attributable to equity shareholders			
Basic	13	**155.2**	201.2
Diluted	13	**155.0**	200.8

Consolidated Statement of Total Comprehensive Income

for the year ended 31st March 2018

	Notes	2018 £ million	2017 £ million
Profit for the year		**298**	385
Other comprehensive income:			
Items that will not be reclassified to profit or loss:			
Remeasurements of post-employment benefit assets and liabilities	17	**103**	(18)
Tax on above items taken directly to or transferred from equity	35	**(31)**	2
		72	(16)
Items that may be reclassified subsequently to profit or loss:			
Currency translation differences	36	**(95)**	163
Share of currency translation differences of joint venture and associate	36	**–**	2
Cash flow hedges	36	**5**	(2)
Fair value gains / (losses) on net investment hedges	36	**6**	(21)
Fair value gains on available-for-sale investments	36	**–**	7
		(84)	149
Other comprehensive (loss) / income for the year		**(12)**	133
Total comprehensive income for the year		**286**	518
Attributable to:			
Equity shareholders		**286**	519
Non-controlling interests		**–**	(1)
		286	518

The notes on pages 150 to 190 form an integral part of the accounts.

Consolidated and Parent Company Balance Sheets

as at 31st March 2018

	Notes	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Assets					
Non-current assets					
Property, plant and equipment	18	**1,155**	1,235	**278**	282
Goodwill	19	**574**	607	**123**	123
Other intangible assets	20	**295**	288	**166**	137
Investments in subsidiaries	21	**–**	–	**1,997**	2,063
Investments in joint venture and associate	22	**20**	22	**–**	–
Deferred income tax assets	33	**48**	26	**–**	–
Available-for-sale investments	23	**56**	58	**7**	7
Interest rate swaps	28	**6**	17	**6**	17
Other receivables	25	**38**	28	**1,013**	1,120
Post-employment benefit net assets	17	**236**	117	**226**	107
Total non-current assets		**2,428**	2,398	**3,816**	3,856
Current assets					
Inventories	24	**783**	772	**124**	124
Current income tax assets		**35**	20	**–**	–
Trade and other receivables	25	**1,228**	1,139	**1,377**	1,139
Cash and cash equivalents – cash and deposits	28	**329**	330	**218**	248
Other financial assets	30	**15**	8	**15**	8
Total current assets		**2,390**	2,269	**1,734**	1,519
Total assets		**4,818**	4,667	**5,550**	5,375
Liabilities					
Current liabilities					
Trade and other payables	26	**(1,012)**	(968)	**(2,552)**	(2,579)
Current income tax liabilities		**(149)**	(134)	**(56)**	(15)
Cash and cash equivalents – bank overdrafts	28	**(53)**	(32)	**(11)**	(16)
Other borrowings and related swaps	28	**(10)**	(20)	**(4)**	(2)
Other financial liabilities	30	**(12)**	(15)	**(14)**	(16)
Provisions	32	**(37)**	(21)	**(5)**	(4)
Total current liabilities		**(1,273)**	(1,190)	**(2,642)**	(2,632)
Non-current liabilities					
Borrowings and related swaps	28	**(951)**	(1,011)	**(951)**	(1,011)
Deferred income tax liabilities	33	**(94)**	(113)	**(43)**	(27)
Employee benefit obligations	17	**(103)**	(112)	**(9)**	(10)
Provisions	32	**(14)**	(18)	**(17)**	(18)
Other payables	26	**(5)**	(6)	**(492)**	(509)
Total non-current liabilities		**(1,167)**	(1,260)	**(1,512)**	(1,575)
Total liabilities		**(2,440)**	(2,450)	**(4,154)**	(4,207)
Net assets		**2,378**	2,217	**1,396**	1,168
Equity					
Share capital	34	**221**	221	**221**	221
Share premium account		**148**	148	**148**	148
Shares held in employee share ownership trust (ESOT)		**(48)**	(55)	**(48)**	(55)
Other reserves	36	**63**	147	**–**	(1)
Retained earnings		**1,994**	1,776	**1,075**	855
Total equity attributable to equity shareholders		**2,378**	2,237	**1,396**	1,168
Non-controlling interests		**–**	(20)	**–**	–
Total equity		**2,378**	2,217	**1,396**	1,168

The accounts were approved by the Board of Directors on 30th May 2018 and signed on its behalf by:

R J MacLeod
A O Manz
Directors

The notes on pages 150 to 190 form an integral part of the accounts.

Accounts

Consolidated and Parent Company Cash Flow Statements

for the year ended 31st March 2018

	Notes	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Cash flows from operating activities					
Profit before tax		**320**	462	**332**	150
Adjustments for:					
Share of loss of joint venture and associate		**1**	–	**–**	–
Loss on disposal of businesses		**7**	–	**–**	–
Depreciation, amortisation, impairment losses and loss / (profit) on sale of non-current assets and investments		**245**	177	**113**	41
Share-based payments		**10**	11	**7**	7
Increase in inventories		**(66)**	(37)	**–**	–
(Increase) / decrease in receivables		**(144)**	(111)	**(138)**	303
Increase / (decrease) in payables		**62**	121	**(88)**	(137)
Increase / (decrease) in provisions		**15**	(27)	**–**	(3)
Contributions in excess of employee benefit obligations charge		**(20)**	(42)	**(19)**	(24)
Changes in fair value of financial instruments		**(5)**	(3)	**(5)**	(4)
Dividends received from subsidiaries		**–**	–	**(264)**	(38)
Net finance costs / (income)		**38**	31	**(16)**	(19)
Income tax paid		**(77)**	(59)	**(10)**	(9)
Net cash inflow / (outflow) from operating activities		**386**	523	**(88)**	267
Cash flows from investing activities					
Dividends received from joint venture		**1**	–	**–**	–
Dividends received from subsidiaries		**–**	–	**264**	38
Interest received		**3**	5	**63**	66
Purchases of property, plant and equipment		**(157)**	(194)	**(37)**	(36)
Purchases of intangible assets		**(59)**	(66)	**(36)**	(64)
Purchases of subsidiaries		**–**	–	**–**	(13)
Proceeds from sale of non-current assets and investments		**7**	4	**5**	–
Purchases of businesses net of cash acquired		**–**	(20)	**–**	–
Net proceeds from sale of businesses	*5*	**5**	–	**–**	–
Net cash (outflow) / inflow from investing activities		**(200)**	(271)	**259**	(9)
Cash flows from financing activities					
Purchase of own shares by ESOT		**–**	(6)	**–**	(6)
Proceeds from borrowings falling due within one year		**2**	–	**–**	–
Proceeds from borrowings falling due after more than one year		**–**	80	**–**	80
Repayment of borrowings falling due within one year		**(14)**	(129)	**–**	(116)
Repayment of borrowings falling due after more than one year		**–**	(4)	**–**	–
Dividends paid to equity shareholders	*14*	**(146)**	(139)	**(146)**	(139)
Settlement of currency swaps		**(1)**	(7)	**(1)**	(7)
Interest paid		**(45)**	(42)	**(49)**	(52)
Net cash outflow from financing activities		**(204)**	(247)	**(196)**	(240)
(Decrease) / increase in cash and cash equivalents in the year		**(18)**	5	**(25)**	18
Exchange differences on cash and cash equivalents		**(4)**	9	**–**	–
Cash and cash equivalents at beginning of year		**298**	284	**232**	214
Cash and cash equivalents at end of year	*28*	**276**	298	**207**	232
Reconciliation to net debt					
(Decrease) / increase in cash and cash equivalents in the year		**(18)**	5	**(25)**	18
Decrease in borrowings		**12**	53	**–**	36
Change in net debt resulting from cash flows		**(6)**	58	**(25)**	54
Borrowings acquired with subsidiaries		**–**	(5)	**–**	–
Exchange differences on net debt		**43**	(94)	**47**	(101)
Movement in net debt in year		**37**	(41)	**22**	(47)
Net debt at beginning of year		**(716)**	(675)	**(764)**	(717)
Net debt at end of year	*28*	**(679)**	(716)	**(742)**	(764)

The notes on pages 150 to 190 form an integral part of the accounts.

Consolidated Statement of Changes in Equity

for the year ended 31st March 2018

	Share capital £ million	Share premium account £ million	Shares held in ESOT £ million	Other reserves (note 36) £ million	Retained earnings £ million	Total attributable to equity holders £ million	Non-controlling interests £ million	Total equity £ million
At 1st April 2016	221	148	(55)	(2)	1,541	1,853	(19)	1,834
Profit for the year	–	–	–	–	386	386	(1)	385
Remeasurements of post-employment benefit assets and liabilities	–	–	–	–	(18)	(18)	–	(18)
Cash flow hedges	–	–	–	(2)	–	(2)	–	(2)
Net investment hedges	–	–	–	(21)	–	(21)	–	(21)
Available-for-sale investments	–	–	–	7	–	7	–	7
Currency translation differences	–	–	–	165	–	165	–	165
Tax on other comprehensive income	–	–	–	–	2	2	–	2
Total comprehensive income	–	–	–	149	370	519	(1)	518
Dividends paid (note 14)	–	–	–	–	(139)	(139)	–	(139)
Purchase of own shares by ESOT	–	–	(6)	–	–	(6)	–	(6)
Share-based payments	–	–	–	–	17	17	–	17
Cost of shares transferred to employees	–	–	6	–	(12)	(6)	–	(6)
Tax on share-based payments	–	–	–	–	(1)	(1)	–	(1)
At 31st March 2017	221	148	(55)	147	1,776	2,237	(20)	2,217
Profit for the year	–	–	–	–	298	298	–	298
Remeasurements of post-employment benefit assets and liabilities	–	–	–	–	103	103	–	103
Cash flow hedges	–	–	–	5	–	5	–	5
Net investment hedges	–	–	–	6	–	6	–	6
Currency translation differences	–	–	–	(95)	–	(95)	–	(95)
Tax on other comprehensive income	–	–	–	–	(31)	(31)	–	(31)
Total comprehensive income	–	–	–	(84)	370	286	–	286
Dividends paid (note 14)	–	–	–	–	(146)	(146)	–	(146)
Purchase of non-controlling interests	–	–	–	–	(9)	(9)	20	11
Share-based payments	–	–	–	–	17	17	–	17
Cost of shares transferred to employees	–	–	7	–	(14)	(7)	–	(7)
At 31st March 2018	**221**	**148**	**(48)**	**63**	**1,994**	**2,378**	**–**	**2,378**

The notes on pages 150 to 190 form an integral part of the accounts.

Parent Company Statement of Changes in Equity

for the year ended 31st March 2018

	Share capital £ million	Share premium account £ million	Shares held in ESOT £ million	Other reserves (note 36) £ million	Retained earnings £ million	Total equity £ million
At 1st April 2016	221	148	(55)	(1)	874	1,187
Profit for the year	–	–	–	–	133	133
Remeasurements of post-employment benefit assets and liabilities	–	–	–	–	(21)	(21)
Cash flow hedges	–	–	–	(2)	–	(2)
Currency translation differences	–	–	–	2	–	2
Tax on other comprehensive income	–	–	–	–	3	3
Total comprehensive income	–	–	–	–	115	115
Dividends paid (note 14)	–	–	–	–	(139)	(139)
Purchase of own shares by ESOT	–	–	(6)	–	–	(6)
Share-based payments	–	–	–	–	15	15
Cost of shares transferred to employees	–	–	6	–	(10)	(4)
At 31st March 2017	221	148	(55)	(1)	855	1,168
Profit for the year	–	–	–	–	282	282
Remeasurements of post-employment benefit assets and liabilities	–	–	–	–	98	98
Cash flow hedges	–	–	–	4	–	4
Currency translation differences	–	–	–	(3)	–	(3)
Tax on other comprehensive income	–	–	–	–	(17)	(17)
Total comprehensive income	–	–	–	1	363	364
Dividends paid (note 14)	–	–	–	–	(146)	(146)
Share-based payments	–	–	–	–	15	15
Cost of shares transferred to employees	–	–	7	–	(12)	(5)
At 31st March 2018	**221**	**148**	**(48)**	**–**	**1,075**	**1,396**

The notes on pages 150 to 190 form an integral part of the accounts.

Accounting policies

for the year ended 31st March 2018

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 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.

Expenses within 2017's Consolidated Income Statement have been reclassified as follows: increase administrative expenses £22 million, reduce cost of sales £19 million and reduce distribution costs £3 million.

Basis of consolidation

The consolidated accounts comprise the accounts of the parent company and all its subsidiaries, including the employee share ownership trust, and include the group's interest in joint ventures and associates. Entities the group controls are accounted for as subsidiaries. Entities that are joint ventures or associates are accounted for using the equity method of accounting. Transactions and balances between group companies are eliminated. No profit is taken on transactions between group companies.

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 recognised in the consolidated accounts at their fair values at the date of acquisition.

In the parent company balance sheet, businesses acquired from other group companies are recognised at book value at the date of acquisition. The difference between the consideration paid and the book value of the net assets acquired is reflected in retained earnings.

Significant accounting policies

The group's and parent company's significant accounting policies are:

Foreign currencies

Foreign currency transactions are recorded in the functional currency of the relevant subsidiary, joint venture, associate or branch at the exchange rate at the date of the 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, joint ventures, associates and branches are translated into sterling at the average rates for the year. Balance sheets of overseas subsidiaries, joint ventures, associates and branches, including any fair value adjustments and 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, joint ventures, associates 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 other comprehensive income. On disposal of the net investment, the cumulative exchange difference is reclassified from equity to operating profit. 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 delivered in line with the International Chamber of Commerce's International Commercial Terms (Incoterms®) as detailed in the relevant contract;
- when the goods are made available to the customer and ownership transfers before despatch; or
- on notification that the goods have been used when they are consignment products located at customers' premises.

With the rendering of services, revenue is recognised by reference to the stage of completion as measured by costs incurred to date as a proportion of estimated total costs.

With royalty and licence income, revenue is recognised in accordance with the substance of the relevant agreement. Where royalties or licences are part of a long-term contract with a single overall profit margin, revenue is recognised by reference to the stage of completion of the contract.

Accounting policies

for the year ended 31st March 2018

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 contract costs incurred to date as a proportion of 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 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 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.

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.

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 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 is stated at cost less accumulated depreciation and any provisions for impairment. 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 and other intangible assets

Goodwill arises on the acquisition of a business when the fair value of the consideration exceeds the fair value attributed to the net assets acquired (including contingent liabilities). It is subject to annual impairment reviews. Acquisition-related costs are charged to the income statement as incurred. The group and parent company have taken advantage of the exemption allowed under IFRS 1 and, therefore, goodwill arising on acquisitions made before 1st April 2004 is included at the carrying amount at that date less any subsequent impairments.

Other intangible assets are stated at cost less accumulated amortisation and any provisions for impairment. Customer contracts are amortised when the relevant income stream occurs using either a straight-line method or, where they relate to a long-term contract, a stage of completion method. All other intangible assets are amortised 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:

- customer contracts and relationships – 1 to 15 years;
- capitalised computer software – 3 to 10 years;
- patents, trademarks and licences – 3 to 20 years;
- acquired research and technology – 4 to 10 years; and
- capitalised development currently being amortised – 3 to 8 years.

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, the investment in that subsidiary is assessed for an indication of impairment.

Accounting policies

for the year ended 31st March 2018

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.

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 cost formula is used to value inventories.

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 and, 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 speculative 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 as held for trading, but are used to manage financial risk.

The vast majority of forward precious metal price contracts are entered into and held for the receipt or delivery of precious metal and, therefore, are not recorded at fair value. If a forward precious metal price contract will be settled net in cash then it is designated and accounted for as a cash flow hedge.

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 other comprehensive income 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 previously recognised in other comprehensive income is transferred out of equity and included in the initial carrying amount of the asset or liability. Otherwise, the amount previously recognised in other comprehensive income 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 other comprehensive income remain in equity until the forecast transaction occurs. If a forecast transaction is no longer expected to occur, the amounts previously recognised in other comprehensive income 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 other comprehensive income, while the ineffective portion is recognised in the income statement. Amounts taken to other comprehensive income are reclassified from equity to the income statement when the foreign operations are sold or liquidated.

Accounting policies

for the year ended 31st March 2018

Other financial instruments

All other financial instruments are initially recognised at fair value plus transaction costs. Subsequent measurement is as follows:

- Borrowings are measured at amortised cost unless they are designated as being fair value hedged, in which case they are remeasured for the fair value changes in respect of the hedged risk with these changes recognised in the income statement.
- Available-for-sale investments which are investments in equity instruments that have a quoted market price in an active market are fair valued at that price with the gain or loss recognised in other comprehensive income. Investments in equity instruments that do not have a quoted market price in an active market are valued at fair value if it can be measured reliably with the gain or loss recognised in other comprehensive income. If the fair value cannot be measured reliably, they are measured at cost.
- Other available-for-sale investments are measured at fair value with interest calculated using the effective interest method recognised in finance income and the remaining gain or loss recognised in other comprehensive income until the investment is derecognised. At that time, the cumulative gain or loss recognised in other comprehensive income will be transferred to the income statement.
- 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, in which case 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 amounts 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 and branches 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 restructuring. Otherwise, material contingent liabilities are disclosed unless the probability of 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.

Share-based payments and employee share ownership trust (ESOT)

The fair value of shares awarded to employees under the Performance Share Plan, Restricted Share Plan, long term incentive plan and deferred bonus 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 performance 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 with employees.

Post-employment benefits

The costs of 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 plans in their balance sheets. Assets are measured at their fair value at the balance sheet date. Liabilities are measured at present value using the projected unit credit method and a discount rate reflecting yields on high quality corporate bonds. The changes in plan assets and liabilities, based on actuarial advice, are recognised as follows:

- The current service cost is deducted in arriving at operating profit.
- The net interest cost, based on the discount rate at the beginning of the year, contributions paid in and the present value of the net defined benefit liabilities during the year, is included in finance costs.
- Past service costs and curtailment gains and losses are recognised in operating profit at the earlier of when the plan amendment or curtailment occurs and when any related restructuring costs or termination benefits are recognised.
- Gains or losses arising from settlements are included in operating profit when the settlement occurs.
- Remeasurements, representing returns on plan assets, excluding amounts included in interest, and actuarial gains and losses arising from changes in financial and demographic assumptions, are recognised in other comprehensive income.

Critical accounting policies

Certain of the group's and parent company's significant accounting policies are considered to be critical because of the level of complexity, judgement or estimation involved in their application and their impact on the accounts.

Post-employment benefits

The group's and parent company's defined benefit plans are assessed annually by qualified independent actuaries. The estimate of the liabilities of the plans is based on a number of actuarial assumptions.

There is a range of possible values for each actuarial assumption and the point within that range is estimated to most appropriately reflect the group's and parent company's circumstances. Small changes in these assumptions can have a significant impact on the estimate of the liabilities of the plans and, therefore, may result in a material change to the group's and parent company's financial position in the year ending 31st March 2019.

Goodwill, other intangible assets and other assets

The group and parent company have significant intangible assets from both business acquisitions and investments in new products and technologies. Some of those acquisitions and investments are at an early stage of commercial development and, therefore, carry a greater risk that they will not be commercially viable. Goodwill and intangible assets not yet ready for use are not amortised, but are subject to annual impairment reviews. Other intangible assets are amortised from the time they are first ready for use. Other assets are assessed for impairment when there is a triggering event that provides evidence that an asset may be impaired.

The impairment reviews require the use of estimates of future profit and cash generation based on financial budgets and plans approved by management covering a three-year period and the pre-tax discount rates used in discounting projected cash flows. The group does not consider that there is a significant risk that changes in goodwill and other intangible assets could result in a material adjustment to its financial position in the year ending 31st March 2019.

Tax provisions

Tax provisions are determined based on the tax laws and regulations that apply in each of the jurisdictions in which the group operates. Tax provisions are recognised where the impact of those laws and regulations is unclear and it is probable that there will be a tax adjustment representing a future outflow of funds to a tax authority or a consequent adjustment to the carrying value of a tax asset.

Provisions are measured using the best estimate of the most likely amount, being the most likely amount in a range of possible outcomes. The resolution of tax positions taken by the group can take a considerable period of time to conclude and, in some cases, it is difficult to predict the outcome. Group current income tax liabilities at 31st March 2018 of £149 million (2017: £134 million) include tax provisions of £86 million (2017: £89 million) and the estimation of the range of possible outcomes is an increase in those liabilities by £61 million (2017: £64 million) to a decrease of £50 million (2017: £51 million). The estimates made reflect where the group: faces routine tax audits or is in ongoing disputes with tax authorities; has identified potential tax exposures relating to transfer pricing; or is contesting the tax deductibility of certain business costs. The group does not consider that there is a significant risk that changes in tax provisions could result in a material adjustment to its financial position in the year ending 31st March 2019.

Accounting policies

for the year ended 31st March 2018

Refining process

The group's and parent company's refining businesses process significant quantities of precious metal and there are uncertainties regarding the actual amount of metal in the refining system at any one time. The group's refining businesses process over four million ounces of platinum group metals per annum with a market value of around £3.4 billion. The majority of metal processed is owned by customers and the group and parent company must return pre-agreed quantities of refined metal based on assays of starting materials and other contractual arrangements, such as, the timing of the return of metal. The group and parent company calculate the profits or losses of their refining operations based on estimates, including the extent to which process losses are expected during refining. The risk of process losses or gains depends on the nature of the starting material being refined, the specific refining processes applied, the efficiency of those processes and the contractual arrangements.

Stock takes are performed to determine the volume and value of metal within the refining system compared with the calculated estimates, with the variance being a profit or a loss. Stock takes are, therefore, a key control in the assessment of the accuracy of the profit or loss of refining operations. Whilst refining is a complex, large scale industrial process, the group and parent company have appropriate processes and controls over the movement of material in their refineries and, historically, have not recorded material stock take gains or losses.

During the year ended 31st March 2018, the group and parent company did not perform a full stock take in their UK refineries due to high levels of customer demand and potential palladium shortages in the market. As a consequence, a stocktake of input materials and finished goods was performed, as in prior years, alongside additional procedures to support the estimates made as part of calculating the value of work in progress. The group and parent company do not consider that there is a significant risk of a material adjustment to its financial position in the year ending 31st March 2019 in respect of refining process gains or losses.

Sources of estimation uncertainty

Determining the carrying amounts of certain assets and liabilities at the balance sheet date requires estimation of the effects of uncertain future events. In the event that actual outcomes differ from those estimated, there may be an adjustment to the carrying amounts of those assets and liabilities within the next financial year. The group and parent company have made appropriate estimates and the only significant risks of material adjustments to their financial position during the year ending 31st March 2019 relate to the determination of the discount rate and inflation assumptions underpinning the valuation of the liabilities of the group's and parent company's defined benefit pension plans and, for the group, to the crystallisation of the contingent liability disclosed in note 32. A description of the discount rate and inflation assumptions, together with sensitivity analysis, is set out in note 17 to the group and parent company accounts. The group is unable to make a reliable estimate of any possible financial impact of the contingent liability at this stage.

Judgements made in applying accounting policies

In the course of preparing the financial statements, no judgements have been made in the process of applying the group's and parent company's accounting policies, other than those involving estimations, that have had a significant effect on the amounts recognised in the financial statements.

Adoption of revised standards and interpretations

In September 2017, the IFRS Interpretations Committee clarified that finance expenses on income tax balances should be reported within finance costs and certain penalties arising on settlements with tax authorities within administrative expenses. The group had previously reported finance expenses and penalties on income tax balances as part of income tax expense. With effect from 1st April 2017, the group has updated its treatment of these balances in accordance with this new guidance. Comparative information has not been restated on the basis that the impact of the change is not material.

In accordance with amendments to IAS 7 'Statement of Cash Flows', the group and parent company have provided reconciliations between the opening and closing balances for assets and liabilities arising from financing activities (note 29).

Standards issued but not yet applied

Standards effective from 1st April 2018

IFRS 9 'Financial Instruments' will be adopted from 1st April 2018. IFRS 9 introduces new requirements for recognition, classification and measurement, a new impairment model for financial assets based on expected credit losses and simplified hedge accounting, replacing the requirements of IAS 39 'Financial Instruments: Recognition and Measurement'.

The group and parent company have completed their reviews of the financial instruments they hold and the way in which those instruments are used. They have identified differences in accounting treatment, where applicable, and have updated their hedging documentation. The review has concluded that the new standard is not expected to have a significant impact on the group's and parent company's equity on transition. The key impact of adopting IFRS 9 is to change the group's and parent company's financial asset impairment provision processes from the current 'incurred loss' model to a forward looking 'expected loss' approach, resulting in earlier recognition of impairments. Other less significant differences in the group relate to the reclassification of certain financial assets from being valued at amortised cost to fair value through other comprehensive income.

Changes to the classification and measurement of financial assets are applied retrospectively by adjusting opening retained earnings at 1st April 2018. The group has chosen not to restate comparative information for prior periods. The provisional impact of adopting IFRS 9 on the group's equity as at 1st April 2018 is a decrease of less than £5 million.

IFRS 15 'Revenue from Contracts with Customers' will be adopted from 1st April 2018, superseding all revenue standards and interpretations in IFRS. IFRS 15 provides a principles-based approach for revenue recognition and requires that revenue is recognised as the distinct performance obligations promised within the contract are satisfied either at a point in time or over time.

Whilst some timing differences have been identified as a result of allocating revenue to distinct performance obligations or where the criteria set out in IFRS 15 for recognising revenue over time are not met, the group and parent company have completed their reviews of major existing contracts and have concluded that applying IFRS 15 will not have a significant impact on the timing and recognition of revenue once it is applied.

The group has chosen to apply IFRS 15 on a modified retrospective basis, recognising the cumulative effect of initial application as an adjustment to opening retained earnings for contracts which are not completed at the adoption date. This means that the comparative information continues to be recognised under existing revenue accounting requirements. The provisional impact of adopting IFRS 15 on the group's equity as at 1st April 2018 is an increase of less than £5 million.

Standards effective from 1st April 2019

IFRS 16 'Leases', which replaces IAS 17 'Leases', was EU endorsed in October 2017. Whilst lessor accounting is similar to IAS 17, lessee accounting is significantly different. Under IFRS 16, the group will recognise on the balance sheet a right-of-use asset and a lease liability for future lease payments in respect of all leases unless the underlying assets are of low value or the lease term is 12 months or less. In the income statement, rental expense on the impacted leases will be replaced with depreciation on the right-of-use asset and interest expense on the lease liability.

As set out in note 39, the group has operating lease commitments totalling £93 million at 31st March 2018 and, therefore, IFRS 16 will have a material impact on the group's balance sheet. The implications of the standard are currently under review and the group has not yet determined which transition option will be applied. As the impact of transition is dependent on the option chosen, the group is unable to quantify the effect at this time.

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 2018

1 Segmental information

Effective 1st April 2017, the group was reorganised into four operating sectors – Clean Air, Efficient Natural Resources, Health and New Markets. Segmental information for the year ended 31st March 2017 has been restated to reflect a change in group structure. The Group Management Committee (the chief operating decision maker as defined by IFRS 8 'Operating Segments') monitors the results of these operating sectors to assess performance and make decisions about the allocation of resources. Each operating sector is represented by a member of the Group Management Committee. These operating sectors represent the group's reportable segments. Their principal activities are described on pages 62 to 69. The performance of the operating sectors is assessed on sales excluding precious metals and underlying operating profit (see note 4). Sales between segments are made at market prices, taking into account the volumes involved.

The group received £1,810 million of revenue from one external customer (2017: £1,835 million) which is 13% (2017: 15%) of the group's revenue from external customers. The revenue is generated by the group's precious metal management activities so has a low margin due to high precious metal content and is reported in the Efficient Natural Resources sector.

Year ended 31st March 2018

	Clean Air £ million	Efficient Natural Resources £ million	Health £ million	New Markets £ million	Eliminations £ million	Total £ million
Revenue from external customers	4,248	9,237	252	385	–	14,122
Inter-segment revenue	260	2,342	–	18	(2,620)	–
Total revenue	4,508	11,579	252	403	(2,620)	14,122
External sales excluding precious metals	2,454	845	247	300	–	3,846
Inter-segment sales	–	111	–	12	(123)	–
Sales excluding precious metals	2,454	956	247	312	(123)	3,846
Segmental underlying operating profit	349	158	44	17	–	568
Unallocated corporate expenses						(43)
Underlying operating profit (note 4)						525
Loss on disposal of businesses (note 5)	–	–	–	(7)		(7)
Loss on significant legal proceedings (note 6)	(50)	–	–	–		(50)
Amortisation of acquired intangibles (note 7)	(3)	(7)	–	(9)		(19)
Major impairment and restructuring charges (note 8)	–	(13)	(56)	(21)		(90)
Operating profit / (loss)	296	138	(12)	(20)		359
Segmental net assets	1,133	1,083	481	208	–	2,905
Net debt						(679)
Post-employment benefit net assets and liabilities						133
Deferred income tax net liabilities						(46)
Provisions and non-current other payables						(56)
Investments in joint venture and associate						20
Unallocated corporate net assets						101
Net assets						2,378
Segmental capital expenditure	71	49	40	18	–	178
Other additions to non-current assets (excluding financial, deferred tax and post-employment benefit net assets)	11	–	–	–	–	11
Segmental total additions to non-current assets	82	49	40	18	–	189
Corporate capital expenditure						39
Total additions to non-current assets						228
Segment depreciation and amortisation	74	47	21	8	–	150
Amortisation of acquired intangibles (note 7)	3	7	–	9	–	19
	77	54	21	17	–	169
Corporate depreciation						6
Total depreciation and amortisation						175

1 Segmental information (continued)

Year ended 31st March 2017

	Clean Air £ million	Efficient Natural Resources £ million	Health £ million	New Markets £ million	Eliminations £ million	Total £ million
Revenue from external customers	3,779	7,643	241	368	–	12,031
Inter-segment revenue	175	1,724	–	18	(1,917)	–
Total revenue	3,954	9,367	241	386	(1,917)	12,031
External sales excluding precious metals	2,224	826	236	292	–	3,578
Inter-segment sales	–	93	–	16	(109)	–
Sales excluding precious metals	2,224	919	236	308	(109)	3,578
Segmental underlying operating profit	318	163	52	12	–	545
Unallocated corporate expenses						(32)
Underlying operating profit (note 4)						513
Amortisation of acquired intangibles (note 7)	(3)	(8)	–	(9)		(20)
Operating profit	315	155	52	3		493
Segmental net assets	1,090	1,132	526	209	–	2,957
Net debt						(716)
Post-employment benefit net assets and liabilities						5
Deferred income tax net liabilities						(87)
Provisions and non-current other payables						(45)
Investments in joint venture and associate						22
Unallocated corporate net assets						81
Net assets						2,217
Segmental capital expenditure	89	53	57	26	–	225
Other additions to non-current assets (excluding financial, deferred tax and post-employment benefit net assets)	3	–	–	24	–	27
Segmental total additions to non-current assets	92	53	57	50	–	252
Corporate capital expenditure						40
Total additions to non-current assets						292
Segment depreciation and amortisation	69	47	19	11	–	146
Amortisation of acquired intangibles (note 7)	3	8	–	9	–	20
	72	55	19	20	–	166
Corporate depreciation						6
Total depreciation and amortisation						172

Notes on the accounts

for the year ended 31st March 2018

1 Segmental information (continued)

The group's country of domicile is the UK. Revenue from external customers based on the customer's location and non-current assets based on the location of the assets are presented below:

	Revenue from external customers		Non-current assets	
	2018 £ million	2017 £ million	**2018 £ million**	2017 £ million
UK	**4,613**	3,640	**849**	839
Germany	**1,347**	1,118	**276**	260
Rest of Europe	**1,597**	1,655	**236**	240
USA	**2,870**	2,216	**399**	495
Rest of North America	**232**	319	**33**	38
China (including Hong Kong)	**1,347**	1,124	**159**	164
Rest of Asia	**1,295**	1,320	**112**	124
Rest of World	**821**	639	**18**	20
Sub-total	**14,122**	12,031	**2,082**	2,180
Deferred income tax assets			**48**	26
Available-for-sale investments			**56**	58
Interest rate swaps			**6**	17
Post-employment benefit net assets			**236**	117
Total			**2,428**	2,398

2 Revenue

	2018 £ million	2017 £ million
Sale of goods	**13,950**	11,853
Rendering of services	**133**	129
Royalties and licence income	**39**	49
Total revenue	**14,122**	12,031

3 Effect of exchange rate changes on translation of foreign subsidiaries' sales excluding precious metals and underlying operating profit

Average exchange rates used for translation of results of foreign operations are as follows:

	2018	2017
US dollar / £	**1.328**	1.308
Euro / £	**1.134**	1.191
Chinese renminbi / £	**8.79**	8.79

The main impact of exchange rate movements on the group's sales and operating profit comes from the translation of foreign subsidiaries' results into sterling.

	Year ended 31st March 2018 £ million	Year ended 31st March 2017 At last year's rates (restated) £ million	Year ended 31st March 2017 At this year's rates £ million	Change at this year's rates %
Sales excluding precious metals				
Clean Air	**2,454**	2,224	2,249	+9
Efficient Natural Resources	**956**	919	922	+4
Health	**247**	236	234	+6
New Markets	**312**	308	317	−2
Inter-segment sales	**(123)**	(109)	(111)	
Sales excluding precious metals	**3,846**	3,578	3,611	+7
Underlying operating profit				
Clean Air	**349**	318	326	+7
Efficient Natural Resources	**158**	163	165	−4
Health	**44**	52	51	−13
New Markets	**17**	12	12	+34
Unallocated corporate expenses	**(43)**	(32)	(32)	
Underlying operating profit	**525**	513	522	–

3 Effect of exchange rate changes on translation of foreign subsidiaries' sales excluding precious metals and underlying operating profit (continued)

The group believes that sales excluding precious metals is a better measure of the underlying performance of the group than revenue. Total revenue can be heavily distorted by year on year fluctuations in the market prices of precious metals. In addition, in many cases, the value of precious metals is passed directly on to our customers.

Underlying profit and earnings are measures that the group believes provide a better guide to the underlying performance of the group. These measures exclude amortisation of acquired intangibles, major impairment and restructuring charges, profit or loss on disposal of businesses, gain or loss on significant legal proceedings together with associated legal costs, significant tax rates changes and, where relevant, related tax effects, and are reconciled to their equivalent GAAP measures in note 4.

4 Underlying profit reconciliations

	2018 £ million	2017 £ million
Underlying operating profit (note 1)	**525**	513
Loss on disposal of businesses (note 5)	**(7)**	–
Loss on significant legal proceedings (note 6)	**(50)**	–
Amortisation of acquired intangibles (note 7)	**(19)**	(20)
Major impairment and restructuring charges (note 8)	**(90)**	–
Operating profit	**359**	493
Underlying profit before tax	**486**	482
Loss on disposal of businesses (note 5)	**(7)**	–
Loss on significant legal proceedings (note 6)	**(50)**	–
Amortisation of acquired intangibles (note 7)	**(19)**	(20)
Major impairment and restructuring charges (note 8)	**(90)**	–
Profit before tax	**320**	462
Tax on underlying profit before tax	**(86)**	(82)
Tax on loss on significant legal proceedings (note 6)	**16**	–
Tax on amortisation of acquired intangibles (note 7)	**4**	5
Tax on major impairment and restructuring charges (note 8)	**21**	–
Tax thereon	**41**	5
Tax rate changes (note 12)	**23**	–
Income tax expense	**(22)**	(77)
Underlying profit for the year	**400**	401
Loss on disposal of businesses (note 5)	**(7)**	–
Loss on significant legal proceedings (note 6)	**(50)**	–
Amortisation of acquired intangibles (note 7)	**(19)**	(20)
Major impairment and restructuring charges (note 8)	**(90)**	–
Tax thereon	**41**	5
Tax rate changes (note 12)	**23**	–
Profit for the year attributable to equity shareholders	**298**	386

5 Loss on disposal of businesses

Profit or loss on disposal of businesses is shown separately on the face of the income statement and excluded from underlying operating profit. On 31st January 2018, the group sold its UK automotive battery systems business. After costs the net proceeds were £5 million which resulted in a loss on sale of £7 million.

6 Loss on significant legal proceedings

Gains or losses on significant legal proceedings, together with associated legal costs, are shown separately on the face of the income statement and excluded from underlying operating profit. The group has recognised a charge of £50 million in connection with the resolution of a contract dispute lawsuit related to a component supplied by the group in the US.

Notes on the accounts

for the year ended 31st March 2018

7 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 and excluded from underlying operating profit.

8 Major impairment and restructuring charges

Major impairment and restructuring charges are shown separately on the face of the income statement and excluded from underlying operating profit. As part of the group's operational efficiency programme announced on 31st March 2017, a restructuring and impairment charge of £90 million has been incurred in the year (2017: nil). The £90 million comprises £66 million asset write offs, £11 million provisions and £13 million cash costs incurred. Contained within this £90 million are costs for redundancies and business or plant closures as part of the optimisation of the manufacturing footprint in Health (including £36 million relating to the closure of the Riverside, US manufacturing facility and £17 million relating to the exit of certain operations in Portugal).

9 Operating profit

		2018 £ million	2017 £ million
Operating profit is arrived at after charging / (crediting):			
Total research and development expenditure		**193**	201
less development expenditure capitalised		**(18)**	(19)
Research and development charged		**175**	182
less external funding received	– from government grants	**(8)**	(9)
	– from other organisations	**(4)**	(5)
Net research and development		**163**	168
Inventories recognised as an expense		**12,261**	10,275
Write-down of inventories recognised as an expense		**26**	12
Reversal of write-down of inventories arising from increases in net realisable value		**(5)**	(8)
Net losses on foreign exchange		**10**	8
Net gains on foreign currency forwards held for trading		**(9)**	(6)
Depreciation of property, plant and equipment		**143**	139
Amortisation of internally generated intangible assets included in cost of sales		**9**	8
Amortisation and impairment of other intangible assets included in	– cost of sales	**4**	2
	– distribution costs	**1**	1
	– administrative expenses	**2**	2
	– amortisation of acquired intangibles (note 7)	**19**	20
	– major impairment and restructuring charges (note 8)	**4**	–
Operating lease rentals payable – minimum lease payments		**19**	19

10 Fees payable to auditors

	2018 £ million	2017 £ million
Fees payable to the company's auditor and its associates for:		
The audit of these accounts	**0.8**	0.7
The audit of the accounts of the company's subsidiaries	**1.4**	1.4
Total audit	**2.2**	2.1
Audit-related assurance services	**0.1**	0.1
Total audit and audit-related services	**2.3**	2.2
Taxation compliance services	**–**	0.1
All other assurance services	**0.4**	0.4
All other services	**0.3**	0.1
Total fees payable to the company's auditor and its associates	**3.0**	2.8

Fees payable for services to the group's pension plans for the audit of the pension plan accounts were £0.1 million (2017: £0.1 million). Audit fees paid to other auditors were £0.1 million (2017: £0.1 million).

Notes on the accounts

for the year ended 31st March 2018

11 Net finance costs

	2018 £ million	2017 £ million
Net loss on remeasurement of foreign currency swaps held for trading	**(3)**	(5)
Net loss on remeasurement of fair value hedges and related hedged items to fair value	**–**	(1)
Interest payable on financial liabilities measured at amortised cost	**(39)**	(31)
Interest on post-employment benefits	**(1)**	–
Unwinding of discount on provisions and non-current payables	**–**	(1)
Total finance costs	**(43)**	(38)
Interest receivable on interest rate swaps	**–**	4
Interest receivable on available-for-sale investments, loans and receivables	**5**	3
Total finance income	**5**	7
Net finance costs	**(38)**	(31)

12 Taxation

	2018 £ million	2017 £ million
Current tax		
Corporation tax on profits for the year	**104**	82
Benefit from previously unrecognised tax losses, tax credits or temporary differences	**(1)**	(1)
Adjustment for prior years	**(11)**	(12)
Total current tax	**92**	69
Deferred tax		
Origination and reversal of temporary differences	**(35)**	9
Tax rate adjustments	**(25)**	(4)
Write-downs, or reversal of previous write-downs, of deferred tax assets	**(9)**	1
Adjustment for prior years	**(1)**	2
Total deferred tax	**(70)**	8
Income tax expense	**22**	77

The tax charge for the year can be reconciled to the profit per the income statement as follows:

	2018 £ million	2017 £ million
Profit before tax	**320**	462
Tax expense at UK corporation tax rate of 19% (2017: 20%)	**61**	92
Effects of:		
Overseas tax rates	**–**	13
Expenses not deductible for tax purposes	**13**	5
Unutilised losses	**8**	3
Utilisation of tax losses and incentives	**(7)**	(10)
Adjustments for prior years	**(12)**	(10)
Innovation – tax incentives	**(20)**	(17)
Tax rate adjustments	**(25)**	(3)
Disposal of businesses	**1**	–
Irrecoverable withholding tax	**1**	5
Other	**2**	(1)
Tax expense for the year	**22**	77

Notes on the accounts

for the year ended 31st March 2018

12 Taxation (continued)

Expenses not deductible for tax purposes in the year ended 31st March 2018 include certain non-deductible costs related to asset write-downs.

Utilisation of tax losses and incentives is mainly the benefit of tax incentives in Macedonia and the recognition of certain other previously unrecognised tax losses.

Adjustments for prior years includes some overseas tax provision releases following the successful conclusion of overseas tax audit negotiations and the expiry of relevant statute of limitations.

Tax rate adjustments include £24 million and £1 million relating to the US and UK respectively. The US federal tax rate was reduced from 35% to 21% with effect from 1st January 2018. In line with this change, the rate applying to US deferred tax assets and liabilities at 31st March 2018 has been reduced from 37% to 23% (including state taxes), creating a US tax rate adjustment which is partly reflected in the Consolidated Income Statement and partly in the Consolidated Statement of Total Comprehensive Income. The net non-underlying benefit in the Consolidated Income Statement is £23 million (note 4).

13 Earnings per ordinary share

	2018 pence	2017 pence
Basic	**155.2**	201.2
Diluted	**155.0**	200.8

Earnings per ordinary share have been calculated by dividing the profit attributable to equity shareholders by the weighted average number of shares in issue during the year.

	2018	2017
Weighted average number of shares in issue		
Basic	**191,985,992**	191,850,710
Dilution for long-term incentive plans	**246,916**	350,862
Diluted	**192,232,908**	192,201,572

Underlying earnings per ordinary share have been calculated by dividing the underlying profit for the year (note 4) by the weighted average number of shares in issue during the year.

	2018 pence	2017 pence
Underlying earnings per share		
Basic	**208.4**	209.1
Diluted	**208.1**	208.7

14 Dividends

	2018 £ million	2017 £ million
2015/16 final ordinary dividend paid – 52.0 pence per share	**–**	100
2016/17 interim ordinary dividend paid – 20.5 pence per share	**–**	39
2016/17 final ordinary dividend paid – 54.5 pence per share	**104**	–
2017/18 interim ordinary dividend paid – 21.75 pence per share	**42**	–
Total dividends	**146**	139

A final dividend of 58.25 pence per ordinary share has been proposed by the board which will be paid on 7th August 2018 to shareholders on the register at the close of business on 8th June 2018, subject to shareholders' approval. The estimated amount to be paid is £112 million and has not been recognised in these accounts.

15 Employee numbers and costs

The average monthly number of employees during the year was:

	2018	2017 (restated)
Clean Air	**5,302**	4,911
Efficient Natural Resources	**3,670**	3,846
Health	**992**	1,012
New Markets	**1,538**	1,751
Corporate and Central Research	**817**	694
Average number of employees	**12,319**	12,214

The number of temporary employees included above at 31st March 2018 is 367 (2017: 359).

The actual number of staff is:

	At 31st March 2018			At 31st March 2017 (restated)		
	Actual employees	Agency staff	Total headcount	Actual employees	Agency staff	Total headcount
Clean Air	**5,470**	**554**	**6,024**	4,948	416	5,364
Efficient Natural Resources	**3,711**	**171**	**3,882**	3,821	182	4,003
Health	**964**	**113**	**1,077**	1,031	101	1,132
New Markets	**1,714**	**429**	**2,143**	1,770	374	2,144
Corporate and Central Research	**856**	**148**	**1,004**	736	46	782
Total	**12,715**	**1,415**	**14,130**	12,306	1,119	13,425

Restated to reflect a change in group structure – see note 1.

Employee benefits expense

	2018 £ million	2017 £ million
Wages and salaries	**548**	526
Social security costs	**59**	56
Pension and other post-employment costs	**69**	46
Termination benefits	**5**	5
Share-based payments	**17**	17
Total employee benefits expense	**698**	650

Notes on the accounts

for the year ended 31st March 2018

16 Share-based payments

After considering expected lapses due to leavers and the probability that performance conditions will not be met, the total expense recognised during the year in respect of equity-settled share-based payments, was £17 million (2017: £17 million).

Further details of the directors' remuneration under share-based payment plans are given in the Remuneration Report.

Performance Share Plan (PSP)

From 2017, shares are awarded to certain of the group's executive directors and senior managers under the PSP based on a percentage of salary and are subject to performance targets over a three-year period.

At 31st March 2018, 357,562 shares awarded in 2017 were outstanding. The minimum release of 15% of the award is subject to achieving underlying earnings per share (uEPS) growth of 4% compound per annum over the three-year period to 31st March 2020 and the full release is subject to uEPS growing by at least 10% compound per annum. The number of awarded shares released will vary on a straight-line basis between these points. Awards will lapse if the uEPS growth is less than the minimum.

Awards to the executive directors are also subject to a deferred release whereby a third is released on the third anniversary of the award date and the remaining vested shares are released in equal instalments on the fourth and fifth anniversaries of the award date. The Remuneration Committee is entitled to claw back the awards to the executive directors in cases of misstatement or misconduct.

Activity relating to the PSP during the year was:

	2018 Number of allocated shares	2017 Number of allocated shares
Outstanding at the start of the year	**–**	–
Awarded during the year	**370,505**	–
Forfeited during the year	**(12,943)**	–
Outstanding at the end of the year	**357,562**	–

The fair value of the shares awarded during the year under the PSP was 2,548.9 pence per share. The fair value was based on the share price at the date of award of 2,764.0 pence adjusted for the present value of the expected dividends that will not be received at an expected dividend rate of 2.71%.

Restricted Share Plan (RSP)

From 2017, shares are awarded to certain of the group's senior managers below the board under the RSP based on a percentage of salary. Awards under the RSP are not subject to performance targets. The shares are subject only to the condition that the employee remains employed by the group on the vesting date (three years after the award date).

Activity relating to the RSP during the year was:

	2018 Number of allocated shares	2017 Number of allocated shares
Outstanding at the start of the year	**–**	–
Awarded during the year	**85,203**	–
Forfeited during the year	**(4,858)**	–
Released during the year	**(298)**	–
Outstanding at the end of the year	**80,047**	–

The fair value of the shares awarded during the year under the RSP was 2,548.9 pence per share. The fair value was based on the share price at the date of award of 2,764.0 pence adjusted for the present value of the expected dividends that will not be received at an expected dividend rate of 2.71%.

16 Share-based payments (continued)

Long term incentive plan (LTIP)

Prior to 2017, shares were awarded to approximately 1,300 of the group's executive directors, senior managers and middle managers under the LTIP based on a percentage of salary and were subject to performance targets over a three-year period.

At 31st March 2018, 1,350,170 shares awarded in 2015 and 2016 (at 31st March 2017: 2,175,761 shares awarded in 2014, 2015 and 2016) were outstanding, together with 20,013 shares awarded in 2014 subject to deferred release as explained below.

For the 2016 awards, the minimum release of 15% of the award is subject to achieving underlying earnings per share (uEPS) growth of 4% compound per annum over the three-year period to 31st March 2019 and the full release is subject to uEPS growing by at least 10% compound per annum. The number of awarded shares released will vary on a straight-line basis between these points. Awards will lapse if the uEPS growth is less than the minimum.

For the 2015 awards, the minimum release of 15% of the award was subject to achieving uEPS growth of 6% compound per annum over the three-year period to 31st March 2018 and the full release was subject to uEPS growing by at least 12% compound per annum. An underpin applies to the 2015 award for certain senior employees below the board who are key to supporting and implementing the group's strategy. Actual uEPS growth was 5.1% and therefore was below the performance range. However, 65,876 shares will vest in August 2018 as a result of the underpin awarded to certain employees. All other awards will lapse in full.

From 2014 onwards, awards to the executive directors are also subject to a deferred release whereby a third is released on the third anniversary of the award date and the remaining vested shares are released in equal instalments on the fourth and fifth anniversaries of the award date. The Remuneration Committee is entitled to claw back the awards to the executive directors in cases of misstatement or misconduct.

Activity relating to the LTIP during the year was:

	2018 Number of awarded shares	2017 Number of awarded shares
Outstanding at the start of the year	**2,175,761**	2,138,725
Awarded during the year	**–**	881,548
Forfeited during the year	**(194,782)**	(144,373)
Released during the year	**(156,849)**	(226,858)
Expired during the year	**(453,947)**	(473,281)
Outstanding at the end of the year	**1,370,183**	2,175,761

The fair value of the shares awarded during the prior year under the LTIP was 3,066.3 pence per share. The fair value was based on the share price at the date of award of 3,273.0 pence adjusted for the present value of the expected dividends that will not be received at an expected dividend rate of 2.18%.

Deferred bonus

A proportion of the bonus payable to executive directors and members of the Group Management Committee is awarded as shares and deferred for three years. The Remuneration Committee is entitled to claw back the deferred element in cases of misstatement or misconduct or other relevant reason as determined by it.

Activity relating to the deferred bonus during the year was:

	2018 Number of awarded shares	2017 Number of awarded shares
Outstanding at the start of the year	**83,956**	69,237
Awarded during the year	**24,831**	16,008
Released during the year	**(27,006)**	(1,289)
Outstanding at the end of the year	**81,781**	83,956

The fair value of the shares awarded during the year under the deferred bonus was 2,481.0 pence per share award (2017: 3,000.4 pence per share award). The fair value was based on the share price at the date of award of 2,764.0 pence (2017: 3,273.0 pence) adjusted for the present value of the expected dividends that will not be received at an expected dividend rate of 2.71% (2017: 2.18%).

Notes on the accounts

for the year ended 31st March 2018

16 Share-based payments (continued)

All employee 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 base 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 awarded to the employee.

In the UK SIP, if the employee sells or transfers partnership shares within three years of the date of award, 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.

During the year, 201,476 (2017: 196,276) matching shares under the SIP were awarded to employees. These are nil cost awards on which performance conditions are substantially completed at the date of grant and, consequently, the fair value of these awards is based on the market value of the shares at that date.

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 share matching are matched 100% of the first 4% contributed and hourly employees are matched 50% of the first 6% contributed. Employees may contribute after one month of service and are eligible for matching after one year of service.

During the year, 6,560 (2017: 14,870) shares under the 401k plans were awarded to employees. These are nil cost awards on which performance conditions are substantially completed at the date of grant and, consequently, the fair value of these awards is based on the market value of the shares at that date.

17 Post-employment benefits

17a Group

Background

Pension plans

The group operates a number of post-employment retirement and medical benefit plans around the world, the forms of which vary with conditions and practices in the countries concerned. The retirement plans in the UK, US and other countries include both defined contribution and defined benefit plans.

For defined contribution plans, retirement benefits are determined by the value of funds arising from contributions paid in respect of each employee and the investment returns on those contributions prior to retirement. The group also makes payments to employees' personal pension plans.

For defined benefit plans, which include final salary, career average and other types of plans with committed pension payments, the retirement benefits are based on factors such as the employee's pensionable salary and length of service. The majority of the group's final salary and career average defined benefit retirement plans are closed to new entrants but remain open to ongoing accrual for current members.

Regulatory framework and governance

The UK pension plan, the Johnson Matthey Employees Pension Scheme (JMEPS), is a registered arrangement established under trust law and, as such, is subject to UK pension, tax and trust legislation. It is managed by a corporate trustee, JMEPS Trustees Limited. The trustee board includes representatives appointed by both the parent company and employees, and includes an independent chairman.

Although the parent company bears the financial cost of the plan, the trustee directors are responsible for the overall management and governance of JMEPS, including compliance with all applicable legislation and regulations. The trustee directors are required by law to act in the interests of all relevant beneficiaries and: to set certain policies; to manage the day to day administration of the benefits; and to set the plan's investment strategy following consultation with the parent company.

UK pensions are regulated by the Pensions Regulator whose statutory objectives and regulatory powers are described on its website: www.thepensionsregulator.gov.uk.

The US pension plans are qualified pension arrangements and are subject to the requirements of the Employee Retirement Income Security Act, the Pension Protection Act 2006 and the Department of Labor and Internal Revenue. The plans are managed by a pension committee which acts as the fiduciary and, as such, is ultimately responsible for: the management of the plans' investments; compliance with all applicable legislation and regulations; and overseeing the general management of the plans.

Other trustee or fiduciary arrangements that have similar responsibilities and obligations are in place for the group's other funded defined benefit pension plans outside of the UK and US.

17 Post-employment benefits (continued)

17a Group (continued)

Background (continued)

Benefits

The UK pension plan is segregated into two sections – a legacy section which provides final salary and career average pension benefits and a cash balance section. The final salary element of the legacy section was closed to future accrual of benefits from 1st April 2010 and the career average element of the legacy section was closed to new entrants on 1st October 2012 but remains open to future accrual for existing members. All new entrants join the cash balance section of the plan.

The legacy section provides benefits to members in the form of a set level of pension payable for life based on the member's length of service and final pensionable salary at retirement or averaged over their career with the company. The benefits attract inflation-related increases both before and after retirement.

The cash balance section provides benefits to members at the point of retirement in the form of a cash lump sum. The benefits attract inflation-related increases before retirement but, following the payment of the retirement lump sum benefit, the plan has no obligation to pay any further benefits to the member.

The group operates two defined benefit pension plans in the US. The hourly pension plan is for unionised employees and provides a fixed retirement benefit for life based upon years of service. The salaried pension plan provides retirement benefits for life based on the member's length of service and final pensionable salary (averaged over the last five years). The salaried plan benefits attract inflation-related increases before leaving, but are non-increasing thereafter. On retirement, members in either plan have the option to take the cash value of their benefit instead of a lifetime annuity in which case the plan has no obligation to pay any further benefits to the member.

The US salaried pension plan was closed to new entrants on 1st September 2013 but remains open to future accrual for existing members. All new non-unionised US employees now join a defined contribution plan.

Other post-employment benefits

The group's principal post-employment medical plans are in the UK and US, and are unfunded arrangements that have been closed to new entrants for over ten years.

Maturity profile

The estimated weighted average durations of the defined benefit obligations of the main plans as at 31st March 2018 are:

	Weighted average duration years
Pensions:	
UK	**19**
US	**12**
Post-retirement medical benefits:	
UK	**12**
US	**14**

Funding

Introduction

The group's principal defined benefit retirement plans are funded through separate fiduciary or trustee administered funds that are independent of the sponsoring company. The contributions paid to these arrangements are jointly agreed by the sponsoring company and the relevant trustee or fiduciary body after each funding valuation and in consultation with independent qualified actuaries. The plans' assets, together with the agreed funding contributions, should be sufficient to meet the plans' future pension obligations.

Notes on the accounts

for the year ended 31st March 2018

17 Post-employment benefits (continued)

17a Group (continued)

Funding (continued)

UK valuations

UK legislation requires that pension plans are funded prudently and that, when undertaking a funding valuation (every three years), assets are taken at their market value and liabilities are determined based on a set of prudent assumptions set by the trustee following consultation with their appointed actuary. The assumptions used for funding valuations may, therefore, differ to the actuarial assumptions used for IAS 19 accounting purposes.

The last funding valuation of JMEPS was carried out as at 1st April 2015. This valuation showed that there was a deficit of £69 million in the legacy section of the plan, or £28 million after taking account of the future additional deficit funding contributions from the special purpose vehicle (SPV) set up in January 2013 called Johnson Matthey (Scotland) Limited Partnership. To address the deficit, the parent company agreed to continue to make deficit contributions of £23 million per year up to 31st December 2019. The valuation also revealed a surplus of £2 million in the defined benefit cash balance section.

The SPV was set up to provide additional deficit reduction contributions and to provide greater security to the trustee. The group invested £50 million in a bond portfolio which is beneficially held by the SPV. The income generated by the SPV is used to make annual distributions of £3.5 million to JMEPS for a period of up to 25 years. These annual distributions are only payable if the legacy section of JMEPS continues to be in deficit. This bond portfolio is held as a non-current available-for-sale investment (note 23) and the group's liability to pay the income to the plan is not a plan asset under IAS 19, although it is for actuarial funding valuation purposes. The SPV is exempt from the requirement to prepare audited annual accounts as it is included on a consolidated basis in these accounts.

In accordance with the governing documentation of JMEPS, any future plan surplus would be returned to the parent company by way of a refund assuming gradual settlement of the liabilities over the lifetime of the plan. As such, there are no adjustments required in respect of IFRIC 14 – 'IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction'.

US valuations

The last annual review of the US defined benefit pension plans was carried out by a qualified actuary as at 1st July 2017 and showed a deficit of $16 million on the projected funding basis. The assumptions used for funding valuations may differ to the actuarial assumptions used for IAS 19 accounting purposes.

Other valuations

Similar funding valuations are undertaken on the group's other defined benefit pension plans outside of the UK and US in accordance with prevailing local legislation.

Risk management

The group is exposed to a number of risks relating to its post-retirement pension plans, the most significant of which are:

Risk	Mitigation
Market (investment) risk Asset returns may not move in line with the liabilities and may be subject to volatility.	The group's various plans have highly diversified investment portfolios, investing in a wide range of assets that provide reasonable assurance that no single security or type of security could have a material adverse impact on the plan. A de-risking strategy is in place to reduce volatility in the plans as a result of the mismatch between the assets and liabilities. As the funding level of the plans improve and hit pre-agreed triggers, plan investments are switched from return-seeking assets to liability-matching assets. The plans implement partial currency hedging on their overseas assets to mitigate currency risk.
Interest (discount) rate risk Liabilities are sensitive to movements in bond yields (interest rates), with lower interest rates leading to an increase in the valuation of liabilities, albeit the impact on the plan's funding level will be partially offset by an increase in the value of its bond holdings.	The group's defined benefit plans hold a high proportion of their assets in government or corporate bonds, which provide a natural hedge against falling interest rates. In the UK, this interest rate hedge is extended by the use of interest rate swaps, such that approximately 70% of the plan's interest rate risk is currently hedged. The swaps are held with several banks to reduce counterparty risk.
Inflation risk Liabilities are sensitive to movements in inflation, with higher inflation leading to an increase in the valuation of liabilities.	Where plan benefits provide inflation-related increases, the plan holds some inflation-linked assets which provide a natural hedge against higher than expected inflation increases. In the UK, this inflation hedge is extended by the use of inflation swaps, such that approximately 70% of the plan's inflation risk is currently hedged. The swaps are held with several banks to reduce counterparty risk. During the year ended 31st March 2018, 34% of eligible pensioners in the UK plan accepted the offer of a pension increase exchange, which reduced the amount of future inflationary pension payable in exchange for higher non-increasing pension.

17 Post-employment benefits (continued)

17a Group (continued)

Funding (continued)

Risk management (continued)

Risk	Mitigation
Longevity risk The majority of the group's defined benefit plans provide benefits for the life of the member, so the liabilities are sensitive to life expectancy, with increases in life expectancy leading to an increase in the valuation of liabilities.	The group has closed most of its defined benefit pension plans to new entrants, replacing them with either a cash balance plan or defined contribution plans, both of which are unaffected by life expectancy. For the plans where a benefit for life continues to be payable, prudent mortality assumptions are used that appropriately allow for a future improvement in life expectancy. These assumptions are reviewed on a regular basis.

Contributions

During the year, total contributions to the group's post-employment defined benefit plans were £69 million (2017: £70 million), including deficit contributions of £23 million (2017: £23 million) in respect of JMEPS.

It is estimated that the group will contribute about £65 million to the post-employment defined benefit plans during the year ending 31st March 2019.

IAS 19 accounting

Principal actuarial assumptions

Qualified independent actuaries have updated the IAS 19 valuations of the group's major defined benefit plans to 31st March 2018. The assumptions used are chosen from a range of possible actuarial assumptions which, due to the long term nature of the plans, may not necessarily be borne out in practice.

Financial assumptions

	2018 UK plans %	**2018 US plans %**	**2018 Other plans %**	2017 UK plans %	2017 US plans %	2017 Other plans %
First year's rate of increase in salaries	**3.75**	**3.00**	**2.50**	3.10	3.00	2.59
Ultimate rate of increase in salaries	**3.75**	**3.00**	**2.50**	3.85	3.00	2.59
Rate of increase in pensions in payment	**2.85**	**–**	**1.50**	3.05	–	1.50
Discount rate	**2.70**	**4.00**	**2.33**	2.60	4.10	2.15
Inflation		**2.20**	**1.60**		2.20	1.61
– UK Retail Prices Index (RPI)	**3.00**			3.10		
– UK Consumer Prices Index (CPI)	**2.00**			2.10		
Current medical benefits cost trend rate	**5.40**	**2.95**	**–**	5.40	2.95	–
Ultimate medical benefits cost trend rate	**5.40**	**2.95**	**–**	5.40	2.95	–

Demographic assumptions

The mortality assumptions are based on country-specific mortality tables and, where appropriate, include an allowance for future improvements in life expectancy. In addition, where credible data exists, actual plan experience is taken into account. The group's most substantial pension liabilities are in the UK and the US where, using the mortality tables adopted, the expected 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 aged 65		**Aged 65 in 25 years**	
	UK plan	**US plans**	**UK plan**	**US plans**
Male	**87**	**86**	**89**	**88**
Female	**89**	**88**	**91**	**90**

Notes on the accounts

for the year ended 31st March 2018

17 Post-employment benefits (continued)

17a Group (continued)

Financial information

Plan assets

Movements in the fair value of 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 2016	1,581	–	255	–	39	1,875
Interest income	59	–	11	–	1	71
Return on plan assets excluding interest	303	–	(2)	–	2	303
Employee contributions	4	–	1	–	–	5
Company contributions	56	–	9	2	3	70
Benefits paid	(55)	–	(21)	(2)	(2)	(80)
Exchange adjustments	–	–	39	–	4	43
At 31st March 2017	1,948	–	292	–	47	2,287
Administrative expenses	–	–	(1)	–	–	(1)
Interest income	51	–	11	–	1	63
Return on plan assets excluding interest	(11)	–	8	–	(2)	(5)
Employee contributions	3	–	1	1	–	5
Company contributions	56	–	10	1	2	69
Benefits paid	(68)	–	(15)	(2)	(2)	(87)
Exchange adjustments	–	–	(34)	–	1	(33)
At 31st March 2018	**1,979**	**–**	**272**	**–**	**47**	**2,298**

The fair values of plan assets are analysed as follows:

	2018 UK pension £ million	**2018 US pensions £ million**	**2018 Other £ million**	2017 UK pension £ million	2017 US pensions £ million	2017 Other £ million
Quoted corporate bonds	**1,093**	**137**	**5**	1,069	143	1
Inflation and interest rate swaps	**63**	**–**	**–**	73	–	–
Quoted government bonds	**22**	**87**	**–**	26	97	–
Cash and cash equivalents	**60**	**–**	**–**	52	1	–
Quoted equity	**630**	**48**	**2**	654	51	2
Unquoted equity	**47**	**–**	**–**	17	–	–
Property	**64**	**–**	**–**	57	–	–
Insurance policies	**–**	**–**	**40**	–	–	44
	1,979	**272**	**47**	1,948	292	47

The UK plan's unquoted equities are assets within a pooled infrastructure fund where the underlying assets are a broad range of private infrastructure investments, diversified by geographic region, infrastructure sector, underlying asset type and development stage. These infrastructure assets are valued using widely recognised valuation techniques which use market data and discounted cash flows. The same valuation approach is used to determine the value of the swaps and insurance policies. The UK plan's property is a unitised fund where the underlying assets are taken at market value. The valuation of the fund is periodically independently audited.

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 assets for the cash balance section of the UK plan are held separately from the assets of the legacy section. At 31st March 2018, the defined benefit obligation related to the contributory cash balance section was £43 million (2017: £33 million) and the fair value of the plan assets was £44 million (2017: £32 million).

17 Post-employment benefits (continued)

17a Group (continued)

Financial information (continued)

Defined benefit obligation

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 2016	(1,480)	(11)	(276)	(48)	(70)	(1,885)
Current service cost – in operating profit	(28)	–	(10)	(1)	(2)	(41)
Current service cost – capitalised	(1)	–	–	–	–	(1)
Past service (cost) / credit	(3)	–	–	17	–	14
Interest cost	(55)	–	(12)	(2)	(2)	(71)
Employee contributions	(4)	–	(1)	–	–	(5)
Remeasurements due to changes in:						
Financial assumptions	(402)	(1)	2	(3)	(5)	(409)
Demographic assumptions	77	2	6	–	2	87
Benefits paid	55	–	21	2	2	80
Exchange adjustments	–	–	(42)	(7)	(7)	(56)
At 31st March 2017	(1,841)	(10)	(312)	(42)	(82)	(2,287)
Current service cost – in operating profit	(41)	–	(8)	(1)	(3)	(53)
Past service credit	4	–	–	–	1	5
Interest cost	(48)	–	(12)	(2)	(2)	(64)
Employee contributions	(3)	–	(1)	(1)	–	(5)
Remeasurements due to changes in:						
Financial assumptions	93	–	(7)	4	3	93
Demographic assumptions	15	1	(2)	1	–	15
Benefits paid	68	–	15	2	2	87
Exchange adjustments	–	–	35	5	(1)	39
At 31st March 2018	**(1,753)**	**(9)**	**(292)**	**(34)**	**(82)**	**(2,170)**

The past service credit in the UK pension plan during the year ended 31st March 2018 is a result of the pension increase exchange exercise, partially offset by a past service cost in respect of pension enhancements for eligible employees who have been made redundant. In the year ended 31st March 2017, a past service credit arose in the US post-retirement medical benefits plan due to plan amendments capping the group's contribution towards medical coverage by limiting the increase in medical inflation to a cost of living increase and giving retirees a choice between the current Platinum plan and a Gold plan.

The remeasurement gain due to changes in financial assumptions in the UK pension plan during the year ended 31st March 2018 mainly reflects a 20 basis-point increase in the real (after inflation) discount rate caused by rising corporate bond yields and falling market-implied inflation.

Reimbursement rights

A government subsidy is receivable under the US Medicare legislation as the US post-retirement medical benefits plan is actuarially equivalent to the Medicare Prescription Drug Act and there is an insurance policy taken out to reinsure the pension commitments of one of the small pension plans which does not meet the definition of a qualifying insurance policy. These are accounted for as reimbursement rights and are shown on the balance sheet in post-employment benefit net assets.

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 2016	–	–	–	6	1	7
Return on assets excluding interest	–	–	–	1	–	1
Exchange adjustments	–	–	–	1	–	1
At 31st March 2017 and 31st March 2018	**–**	**–**	**–**	**8**	**1**	**9**

Notes on the accounts

for the year ended 31st March 2018

17 Post-employment benefits (continued)

17a Group (continued)

Financial information (continued)

Net post-employment benefit assets and liabilities

The net post-employment benefit assets and liabilities are:

	UK pension £ million	UK post-retirement medical benefits £ million	US pensions £ million	US post-retirement medical benefits £ million	Other £ million	Total £ million
At 31st March 2018						
Defined benefit obligation	**(1,753)**	**(9)**	**(292)**	**(34)**	**(82)**	**(2,170)**
Fair value of plan assets	**1,979**	**–**	**272**	**–**	**47**	**2,298**
Reimbursement rights	**–**	**–**	**–**	**8**	**1**	**9**
Net post-employment benefit assets and liabilities	**226**	**(9)**	**(20)**	**(26)**	**(34)**	**137**
At 31st March 2017						
Defined benefit obligation	(1,841)	(10)	(312)	(42)	(82)	(2,287)
Fair value of plan assets	1,948	–	292	–	47	2,287
Reimbursement rights	–	–	–	8	1	9
Net post-employment benefit assets and liabilities	107	(10)	(20)	(34)	(34)	9

These are included in the balance sheet as follows:

	2018 Post-employment benefit net assets £ million	2018 Employee benefit net obligations £ million	2018 Total £ million	2017 Post-employment benefit net assets £ million	2017 Employee benefit net obligations £ million	2017 Total £ million
UK pension plan	**226**	**–**	**226**	107	–	107
UK post-retirement medical benefits plan	**–**	**(9)**	**(9)**	–	(10)	(10)
US pension plans	**–**	**(20)**	**(20)**	–	(20)	(20)
US post-retirement medical benefits plan	**8**	**(34)**	**(26)**	8	(42)	(34)
Other plans	**2**	**(36)**	**(34)**	2	(36)	(34)
Total post-employment plans	**236**	**(99)**	**137**	117	(108)	9
Other long-term employee benefits		**(4)**			(4)	
Total long term employee benefit obligations		**(103)**			(112)	

Income statement

Amounts recognised in the income statement for long term employment benefits were:

	2018 £ million	2017 £ million
Administrative expenses	**(1)**	–
Current service cost	**(53)**	(41)
Past service credit	**5**	14
Defined benefit post-employment costs charged to operating profit	**(49)**	(27)
Defined contribution plans' expense	**(19)**	(18)
Other long term employee benefits	**(1)**	(1)
Charge to operating profit	**(69)**	(46)
Interest on post-employment benefits charged to finance costs	**(1)**	–
Charge to profit before tax	**(70)**	(46)

Sensitivity analysis

The calculations of the defined benefit obligations are sensitive to the assumptions used. The following summarises the estimated impact on the group's main plans of a change in the assumption while holding all other assumptions constant. This sensitivity analysis may not be representative of the actual change as it is unlikely that the change in assumptions would occur in isolation of one another.

17 Post-employment benefits (continued)

17a Group (continued)

Sensitivity analysis (continued)

Financial assumptions

A 0.1% change in the discount rate and inflation assumptions would (increase) / decrease the UK and US pension plans' defined benefit obligations at 31st March 2018 as follows:

	0.1% increase		0.1% decrease	
	UK plan £ million	US plans £ million	UK plan £ million	US plans £ million
Effect of discount rate	**34**	**2**	**(35)**	**(5)**
Effect of inflation	**(32)**	**–**	**21**	**–**

Demographic assumptions

A one-year increase in life expectancy would increase the UK and US pension plans' defined benefit obligation by £58 million and £6 million, respectively.

17b 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 plans to the individual group entities. The parent company recognises the net defined benefit cost for these plans and information is disclosed in note 17a.

18 Property, plant and equipment

18a Group

	Freehold land and buildings £ million	Long and short leasehold £ million	Plant and machinery £ million	Assets in the course of construction £ million	Total £ million
Cost					
At 1st April 2016	524	23	1,660	154	2,361
Additions	4	–	38	156	198
Acquisitions	–	–	1	–	1
Reclassifications	15	2	70	(87)	–
Disposals	(1)	–	(23)	–	(24)
Exchange adjustments	46	2	136	14	198
At 31st March 2017	588	27	1,882	237	2,734
Additions	7	–	40	114	161
Reclassifications	21	–	114	(135)	–
Disposals	(12)	–	(25)	(1)	(38)
Disposal of businesses (note 5)	–	–	(3)	–	(3)
Exchange adjustments	(26)	(2)	(89)	(6)	(123)
At 31st March 2018	578	25	1,919	209	2,731
Accumulated depreciation and impairment					
At 1st April 2016	207	12	1,051	5	1,275
Charge for the year	19	2	118	–	139
Reversal of impairment losses	–	–	(2)	–	(2)
Disposals	(1)	–	(21)	–	(22)
Exchange adjustments	19	1	88	1	109
At 31st March 2017	244	15	1,234	6	1,499
Charge for the year	20	1	122	–	143
Impairment losses	7	–	30	3	40
Disposals	(8)	–	(24)	–	(32)
Disposal of businesses (note 5)	–	–	(1)	–	(1)
Exchange adjustments	(13)	(1)	(59)	–	(73)
At 31st March 2018	250	15	1,302	9	1,576
Carrying amount at 31st March 2018	**328**	**10**	**617**	**200**	**1,155**
Carrying amount at 31st March 2017	344	12	648	231	1,235
Carrying amount at 1st April 2016	317	11	609	149	1,086

Notes on the accounts

for the year ended 31st March 2018

18 Property, plant and equipment (continued)

18a Group (continued)

Finance costs capitalised were £4 million (2017: £5 million) and the capitalisation rate used to determine the amount of finance costs eligible for capitalisation was 3.3% (2017: 3.5%).

The impairment losses for the year ended 31st March 2018 of £40 million were included in major impairment and restructuring charges (note 8). The impairment includes £30 million as a result of the closure of the Riverside, US manufacturing facility in the Health Sector. The recoverable amount of the plant is estimated to be nil based on fair value less costs to sell using level 2 inputs (see note 30) reflecting its specialised nature. The reversal of impairment losses in the prior year represented adjustments to major impairment and restructuring charges.

18b Parent company

	Freehold land and buildings £ million	Long and short leasehold £ million	Plant and machinery £ million	Assets in the course of construction £ million	Total £ million
Cost					
At 1st April 2016	124	2	514	17	657
Additions	2	–	14	20	36
Reclassifications	–	–	7	(7)	–
Disposals	–	–	(7)	–	(7)
At 31st March 2017	126	2	528	30	686
Additions	1	–	13	26	40
Reclassifications	6	–	17	(23)	–
Disposals	(3)	–	(2)	(2)	(7)
At 31st March 2018	130	2	556	31	719
Accumulated depreciation and impairment					
At 1st April 2016	50	1	322	–	373
Charge for the year	4	–	33	–	37
Disposals	–	–	(6)	–	(6)
At 31st March 2017	54	1	349	–	404
Charge for the year	4	–	33	–	37
Impairment losses	–	–	1	–	1
Disposals	–	–	(1)	–	(1)
At 31st March 2018	58	1	382	–	441
Carrying amount at 31st March 2018	**72**	**1**	**174**	**31**	**278**
Carrying amount at 31st March 2017	72	1	179	30	282
Carrying amount at 1st April 2016	74	1	192	17	284

Finance costs capitalised were £2 million (2017: £2 million) and the capitalisation rate used to determine the amount of finance costs eligible for capitalisation was 3.3% (2017: 3.5%).

19 Goodwill

	Group £ million	Parent company £ million
Cost		
At 1st April 2016	570	123
Acquisitions (note 37)	7	–
Exchange adjustments	30	–
At 31st March 2017	607	123
Disposal of businesses (note 5)	(9)	–
Exchange adjustments	(13)	–
At 31st March 2018	585	123
Impairment		
At 1st April 2016 and 31st March 2017	–	–
Impairment losses	11	–
At 31st March 2018	11	–
Carrying amount at 31st March 2018	**574**	**123**
Carrying amount at 31st March 2017	607	123
Carrying amount at 1st April 2016	570	123

The impairment losses for the year ended 31st March 2018 of £11 million were included in major impairment and restructuring charges (note 8).

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	
	2018 £ million	2017 (restated) £ million	**2018 £ million**	2017 (restated) £ million
Clean Air				
– Non-light Duty Catalysts	**85**	85	**–**	–
Efficient Natural Resources				
– Process Technologies	**314**	325	**113**	113
– Other	**3**	3	**–**	–
Health				
– Macfarlan Smith	**117**	117	**–**	–
– Pharmaceutical Materials and Services	**26**	29	**2**	2
New Markets				
– Water Technologies	**–**	11	**–**	–
– Other	**29**	37	**8**	8
	574	607	**123**	123

Restated to reflect a change in group structure (see note 1).

New Markets – Other comprises CGUs with goodwill balances individually less than £10 million. The group's UK automotive battery systems business was sold in January 2018 (note 5). The net assets disposed of included goodwill of £9 million.

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 covering a three-year period approved by management. 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 forward 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.

Notes on the accounts

for the year ended 31st March 2018

19 Goodwill (continued)

The key assumptions are:

	Discount rate 2018	Discount rate 2017	Long term growth rate 2018	Long term growth rate 2017
Clean Air – Non-light Duty Catalysts	**9.9%**	9.5%	**0.0%**	1.6%
Efficient Natural Resources – Process Technologies	**10.5%**	9.9%	**2.4%**	2.9%
Health				
- Macfarlan Smith	**8.1%**	7.4%	**2.8%**	3.2%
- Pharmaceutical Materials and Services	**8.8%**	9.2%	**2.8%**	3.2%
New Markets – Water Technologies	**13.5%**	11.5%	**3.0%**	5.0%

The growth rate for the Clean Air – Non-light Duty Catalysts CGU for years four to ten is expected to be 1.5% (2017: 3.0%). After that, growth is expected to slow and, therefore, the long term growth rate above is used for year 11 onwards.

With the exception of the Water Technologies CGU, the impairment tests result in headroom of at least 35% over the carrying value of the relevant CGU's net assets. The Water Technologies CGU represents a portfolio of water purification products and services, including the MIOX and Finex businesses acquired during 2016. Goodwill totalling £11 million has been fully impaired reflecting lower growth rate assumptions for these businesses. The total intangibles impairment in respect of the Water Technologies CGU is £15 million, which has been allocated against goodwill (£11 million) and other intangible assets (£4 million). Following the impairments, the residual carrying value of the Water Technologies CGU is £15 million.

20 Other intangible assets

20a Group

	Customer contracts and relationships £ million	Computer software £ million	Patents, trademarks and licences £ million	Acquired research and technology £ million	Development expenditure £ million	Total £ million
Cost						
At 1st April 2016	150	116	41	61	141	509
Additions	–	35	13	–	19	67
Acquisitions (note 37)	1	–	13	1	–	15
Disposals	–	(1)	–	–	–	(1)
Exchange adjustments	13	4	4	2	16	39
At 31st March 2017	164	154	71	64	176	629
Additions	–	38	–	–	18	56
Disposals	–	(1)	–	–	–	(1)
Disposal of businesses	(5)	–	–	(11)	–	(16)
Exchange adjustments	(7)	(3)	(2)	–	(14)	(26)
At 31st March 2018	152	188	69	53	180	642
Accumulated amortisation and impairment						
At 1st April 2016	89	45	24	26	100	284
Charge for the year	9	5	4	7	8	33
Disposals	–	(1)	–	–	–	(1)
Exchange adjustments	8	3	2	2	10	25
At 31st March 2017	106	52	30	35	118	341
Charge for the year	9	5	3	6	9	32
Impairment losses	1	–	3	1	2	7
Disposals	–	(1)	–	–	–	(1)
Disposal of businesses	(5)	–	–	(11)	–	(16)
Exchange adjustments	(4)	(2)	(1)	–	(9)	(16)
At 31st March 2018	107	54	35	31	120	347
Carrying amount at 31st March 2018	**45**	**134**	**34**	**22**	**60**	**295**
Carrying amount at 31st March 2017	58	102	41	29	58	288
Carrying amount at 1st April 2016	61	71	17	35	41	225

20 Other intangible assets (continued)

20b Parent company

	Computer software £ million	Patents, trademarks and licences £ million	Acquired research and technology £ million	Development expenditure £ million	Total £ million
Cost					
At 1st April 2016	80	7	11	12	110
Additions	33	26	–	1	60
At 31st March 2017	113	33	11	13	170
Additions	35	–	–	3	38
At 31st March 2018	148	33	11	16	208
Accumulated amortisation and impairment					
At 1st April 2016	19	1	1	8	29
Charge for the year	2	1	1	–	4
At 31st March 2017	21	2	2	8	33
Charge for the year	2	1	1	1	5
Impairment losses	–	3	1	–	4
At 31st March 2018	23	6	4	9	42
Carrying amount at 31st March 2018	**125**	**27**	**7**	**7**	**166**
Carrying amount at 31st March 2017	92	31	9	5	137
Carrying amount at 1st April 2016	61	6	10	4	81

21 Investments in subsidiaries

	Cost of investments in subsidiaries £ million	Accumulated impairment £ million	Carrying amount £ million
At 1st April 2016	2,242	(192)	2,050
Additions	13	–	13
At 31st March 2017	2,255	(192)	2,063
Impairment losses	–	(66)	(66)
At 31st March 2018	**2,255**	**(258)**	**1,997**

Impairment losses in the year ended 31st March 2018 have been recognised following changes to the group's structure. The subsidiaries are shown in note 41.

Notes on the accounts

for the year ended 31st March 2018

22 Investments in joint venture and associate

	2018 £ million	2017 £ million
Investment in joint venture	**5**	6
Investment in associate	**15**	16
At end of year	**20**	22

The movements in the year were:

	Joint venture £ million	Associate £ million	Total £ million
At 1st April 2016	4	16	20
Group's share of profit / (loss) for the year	1	(1)	–
Group's share of other comprehensive income – currency translation differences	1	1	2
Group's share of total comprehensive income	2	–	2
At 31st March 2017	6	16	22
Group's share of total comprehensive income – loss for the year	–	(1)	(1)
Dividends received	(1)	–	(1)
At 31st March 2018	**5**	**15**	**20**

The group has an 11.1% interest in the ordinary share capital of Shanghai Bi Ke Clean Energy Technology Co Ltd (CECC) and has significant influence in this entity as CECC requires unanimous board decisions. As a result, this investment is accounted for as an investment in an associate in the group accounts. In addition, the parent company has a revenue share agreement with CECC which is accounted for as a non-current available-for-sale investment (note 23).

23 Non-current available-for-sale investments

	Group		Parent company	
	2018 £ million	2017 £ million	**2018 £ million**	2017 £ million
Quoted bonds purchased to fund pension deficit	**53**	54	**–**	–
Unquoted investments	**3**	4	**7**	7
	56	58	**7**	7

The quoted bonds are measured at fair value using level 1 inputs (note 30). There is no active market for the unquoted investments since they are investments in a company that is in the start-up phase and in investment vehicles that invest in start-up companies and are categorised as level 3 (note 30). The parent company's investment is the revenue share agreement with CECC (note 22). Movements in the unquoted investments in the year are shown below (given their size, no additional detail has been provided):

	Group £ million	Parent company £ million
At 1st April 2016	6	7
Impairment losses	(2)	–
At 31st March 2017	4	7
Impairment losses	(1)	–
At 31st March 2018	**3**	**7**

24 Inventories

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Raw materials and consumables	**232**	235	**31**	28
Work in progress	**259**	257	**18**	27
Finished goods and goods for resale	**292**	280	**75**	69
	783	772	**124**	124

The group also holds customers' materials in the process of refining and fabrication and for other reasons.

25 Trade and other receivables

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Current				
Trade receivables	**1,049**	951	**165**	164
Amounts receivable from long-term contract customers	**16**	14	**–**	1
Amounts receivable from subsidiaries	**–**	–	**1,149**	908
Prepayments and accrued income	**85**	86	**19**	16
Value added tax and other sales tax receivable	**34**	44	**11**	14
Other receivables	**44**	44	**33**	36
Current trade and other receivables	**1,228**	1,139	**1,377**	1,139
Non-current				
Amounts receivable from subsidiaries	**–**	–	**1,013**	1,120
Prepayments and accrued income	**38**	28	**–**	–
Non-current other receivables	**38**	28	**1,013**	1,120

26 Trade and other payables

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Current				
Trade payables	**597**	529	**205**	160
Amounts payable to long term contract customers	**21**	31	**–**	–
Amounts payable to subsidiaries	**–**	–	**2,198**	2,295
Accruals and deferred income	**306**	314	**110**	96
Other payables	**88**	94	**39**	28
Current trade and other payables	**1,012**	968	**2,552**	2,579
Non-current				
Amounts payable to subsidiaries	**–**	–	**489**	506
Other payables	**5**	6	**3**	3
Non-current other payables	**5**	6	**492**	509

27 Long-term contracts

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Contract revenue recognised	**42**	61	**2**	1
Contracts in progress at the year end:				
Costs incurred plus recognised profits less recognised losses to date	**237**	265	**2**	1
Amount of advances received	**30**	28	**–**	1

Notes on the accounts

for the year ended 31st March 2018

28 Net debt

28a Cash and cash equivalents

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Cash and deposits	**329**	330	**218**	248
Bank overdrafts	**(53)**	(32)	**(11)**	(16)
Cash and cash equivalents	**276**	298	**207**	232

28b Net debt

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Non-current borrowings and related swaps	**(951)**	(1,011)	**(951)**	(1,011)
Current borrowings and related swaps	**(63)**	(52)	**(15)**	(18)
Total borrowings	**(1,014)**	(1,063)	**(966)**	(1,029)
Cash and deposits	**329**	330	**218**	248
Non-current interest rate swap assets	**6**	17	**6**	17
Net debt	**(679)**	(716)	**(742)**	(764)
Bank and other loans				
1.945% €124 million European Investment Bank (EIB) loan 2019	**(109)**	(107)	**(109)**	(107)
$50 million KfW IPEX-Bank GmbH (KfW) loan 2020	**(36)**	(40)	**(36)**	(40)
4.66% €100 million Bonds 2021	**(87)**	(86)	**(87)**	(86)
€166 million EIB loan 2022	**(145)**	(142)	**(145)**	(142)
3.26% $150 million Bonds 2022	**(106)**	(123)	**(106)**	(123)
2.99% $165 million Bonds 2023	**(117)**	(132)	**(117)**	(132)
2.44% €20 million Bonds 2023	**(17)**	(17)	**(17)**	(17)
3.57% £65 million Bonds 2024	**(65)**	(65)	**(65)**	(65)
3.565% $50 million KfW loan 2024	**(36)**	(40)	**(36)**	(40)
3.14% $130 million Bonds 2025	**(97)**	(104)	**(97)**	(104)
3.39% $180 million Bonds 2028	**(128)**	(148)	**(128)**	(148)
Cross currency interest rate swaps designated as net investment hedges	**(7)**	(7)	**–**	–
Cross currency interest rate swaps designated as fair value hedges	**–**	–	**(7)**	(7)
Interest rate swaps designated as fair value hedges	**(1)**	–	**(1)**	–
Non-current borrowings and related swaps	**(951)**	(1,011)	**(951)**	(1,011)
Cash and cash equivalents – bank overdrafts	**(53)**	(32)	**(11)**	(16)
Other current borrowings and related swaps	**(10)**	(20)	**(4)**	(2)
Current borrowings and related swaps	**(63)**	(52)	**(15)**	(18)
Other bank and other loans	**(8)**	(20)	**(2)**	(2)
Cross currency interest rate swaps designated as net investment hedges	**(2)**	–	**–**	–
Cross currency interest rate swaps designated as fair value hedges	**–**	–	**(2)**	–
Other current borrowings and related swaps	**(10)**	(20)	**(4)**	(2)
Cross currency interest rate swaps designated as cash flow hedges	**6**	15	**6**	15
Interest rate swaps designated as fair value hedges	**–**	2	**–**	2
Non-current interest rate swap – assets	**6**	17	**6**	17

The 3.26% $150 million Bonds 2022 have been swapped into floating rate US dollars. $100 million of the 3.14% $130 million Bonds 2025 have been swapped into sterling at 2.83%. All borrowings bear interest at fixed rates with the exception of the 2020 KfW loan, the 2022 EIB loan, a loan with a book value of £2 million and the bank overdrafts, which bear interest at commercial floating rates.

The cross currency and interest rate swaps are measured at fair value using level 2 inputs (note 30). The bonds which are designated as being fair value hedged are remeasured for the fair value changes in respect of the hedged risk using level 2 inputs. The fair values are estimated by discounting the future contractual cash flows using appropriate market sourced data at the balance sheet date.

29 Movements in assets and liabilities arising from financing activities

29a Group

	2017 £ million	Cash outflow £ million	Non-cash movements: Transfers £ million	Non-cash movements: Foreign exchange movements £ million	Non-cash movements: Fair value and other movements £ million	**2018 £ million**
Non-current assets						
Interest rate swaps	17	–	(2)	(9)	–	**6**
Non-current liabilities						
Borrowings and related swaps	(1,011)	1	4	56	(1)	**(951)**
Current liabilities						
Other borrowings and related swaps	(20)	12	(2)	–	–	**(10)**
		13	**–**	**47**	**(1)**	
Dividends paid to equity shareholders		146				
Interest paid		45				
Net cash outflow from financing activities		**204**				

29b Parent company

	2017 £ million	Cash outflow £ million	Non-cash movements: Transfers £ million	Non-cash movements: Foreign exchange movements £ million	Non-cash movements: Fair value and other movements £ million	**2018 £ million**
Non-current assets						
Interest rate swaps	17	–	(2)	(9)	–	**6**
Non-current liabilities						
Borrowings and related swaps	(1,011)	1	4	56	(1)	**(951)**
Current liabilities						
Other borrowings and related swaps	(2)	–	(2)	–	–	**(4)**
		1	**–**	**47**	**(1)**	
Dividends paid to equity shareholders		146				
Interest paid		49				
Net cash outflow from financing activities		**196**				

30 Other financial assets and liabilities

	Group **2018 £ million**	Group 2017 £ million	Parent company **2018 £ million**	Parent company 2017 £ million
Other financial assets				
Forward foreign exchange contracts designated as cash flow hedges	**6**	4	**6**	4
Forward foreign exchange contracts and currency swaps held for trading	**9**	4	**9**	4
Other financial assets	**15**	8	**15**	8
Other financial liabilities				
Forward foreign exchange contracts designated as cash flow hedges	**(2)**	(6)	**(4)**	(7)
Forward precious metal price contracts designated as cash flow hedges	**(3)**	(2)	**(3)**	(2)
Forward foreign exchange contracts and currency swaps held for trading	**(7)**	(6)	**(7)**	(7)
Foreign exchange swaps designated as hedges of a net investment in foreign operations	**–**	(1)	**–**	–
Other financial liabilities	**(12)**	(15)	**(14)**	(16)

Notes on the accounts

for the year ended 31st March 2018

30 Other financial assets and liabilities (continued)

Fair values are measured using a hierarchy where the inputs are:

- Level 1 – quoted prices in active markets for identical assets or liabilities.
- Level 2 – not level 1 but are observable for that asset or liability either directly or indirectly.
- Level 3 – not based on observable market data (unobservable).

Of the other financial assets listed above, all are measured at fair value using level 2 inputs. All other financial liabilities are measured at fair value using level 2 inputs.

The fair value of forward foreign exchange contracts, forward precious metal price contracts and currency swaps is estimated using appropriate market sourced data at the balance sheet date.

31 Financial risk management

The group's and parent company's activities expose them to a variety of financial risks including credit risk, market risk and liquidity risk. Market risk includes foreign 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 credit risk, foreign currency risk, interest rate risk and liquidity 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, therefore, are classified as 'held for trading'. The group and parent company do not undertake any speculative trading activity in financial instruments.

31a 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 sector 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 2018, trade receivables for the group amounted to £1,049 million (2017: £951 million) (parent company £165 million (2017: £164 million)). £799 million (2017: £691 million) of these receivables at group level (£115 million (2017: £101 million) at parent company level) arose in Clean Air which mainly supplies the automotive industry including car and truck manufacturers and component suppliers. Although Clean Air has a wide spread of 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. At 31st March 2018, for the group as a whole, no single outstanding balance exceeded 2% (2017: 2%) of 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 where possible 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	
	2018 £ million	2017 £ million	**2018 £ million**	2017 £ million
Amounts neither past due nor impaired	**966**	885	**152**	149
Amounts past due but not impaired				
less than 30 days	**62**	50	**7**	11
30 – 90 days	**19**	9	**6**	2
more than 90 days	**2**	6	**–**	2
Total past due but not impaired	**83**	65	**13**	15
Amounts impaired	**9**	7	**3**	1
Specific allowances for bad and doubtful debts	**(9)**	(6)	**(3)**	(1)
Carrying amount of impaired receivables	**–**	1	**–**	–
Trade receivables net of allowances	**1,049**	951	**165**	164

31 Financial risk management (continued)

31a Credit risk (continued)

Movements in the allowances for impairments were:

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
At beginning of year	**6**	7	**1**	1
Charge for year	**5**	2	**2**	–
Released	**(2)**	(2)	**–**	–
Utilised	**–**	(2)	**–**	–
Exchange adjustments	**–**	1	**–**	–
At end of year	**9**	6	**3**	1

The group's financial assets included in sundry receivables are all current and not impaired. Of the parent company's amounts receivable from subsidiaries £128 million is impaired (2017: £128 million).

The credit risk on cash and deposits and derivative financial instruments is limited because the counterparties with significant balances are banks with strong 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 2018, the maximum net exposure with a single bank for cash and deposits was £67 million (2017: £49 million) for the group and £12 million (2017: £22 million) for the parent company, whilst the largest mark to market exposure for derivative financial instruments to a single bank was £3 million (2017: £10 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 2018, the group's and parent company's exposure to these funds was £171 million (2017: £211 million). 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, payables and precious metal leases, and its exposure at 31st March 2018 was £32 million (2017: £28 million).

31b 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 US 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 using a currency swap.

The group has designated the currency swaps, a US dollar loan and euro loans (fair value of the loans was £167 million (2017: a US dollar loan and a euro loan with a fair value of £67 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 change in the value of the net investment hedges from movements in foreign currency exchange rates is recognised in equity and is offset by an equal and opposite movement in the carrying value of the net assets of the subsidiaries.

The main currencies of the net debt after taking into account the effect of the currency swaps were:

	Group Borrowings 2018 £ million	Group Borrowings 2017 £ million	Group Cash 2018 £ million	Group Cash 2017 £ million	Parent company Borrowings 2018 £ million	Parent company Borrowings 2017 £ million	Parent company Cash 2018 £ million	Parent company Cash 2017 £ million
Sterling	**976**	911	**596**	678	**977**	898	**588**	689
US dollar	**608**	658	**547**	500	**608**	662	**537**	486
Euro	**473**	526	**273**	239	**476**	526	**260**	234
Chinese renminbi	**68**	68	**30**	43	**45**	68	**2**	2
Hong Kong dollar	**53**	23	**132**	94	**53**	23	**132**	94
Swedish krona	**53**	66	**–**	–	**53**	66	**–**	–
Other currencies	**154**	124	**128**	106	**125**	99	**76**	73
	2,385	2,376	**1,706**	1,660	**2,337**	2,342	**1,595**	1,578

Notes on the accounts

for the year ended 31st March 2018

31 Financial risk management (continued)

31b Foreign currency risk (continued)

The group's objective is to match foreign currency assets and liabilities at an entity level in order to avoid any impact on the income statement of the entity resulting from movements in exchange rates.

The group and parent company use forward exchange contracts 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 in the year ending 31st March 2019.

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% (6.6 cent (2017: 6.5 cent)) movement in the average exchange rate for the US dollar against sterling would have had an £11 million (2017: £10 million) impact on underlying operating profit. The group is also exposed to the euro and a 5% (5.7 cent (2017: 6.0 cent)) movement in the average exchange rate for the euro against sterling would have had a £10 million (2017: £10 million) impact on underlying 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 it operates.

31c 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 one (2017: one) US dollar fixed rate to US dollar floating rate swap as a fair value hedge as it hedges the changes in the fair value of bonds attributable to changes in interest rates. The losses on the interest rate swaps in the year ended 31st March 2018 were £3 million (2017: £8 million) and the gains on the bonds attributable to the hedged risk were £3 million (2017: £6 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. Its cash flows are expected to occur in 2025 when the bond which it hedges matures and, therefore, the exchange effect on it is expected to be realised in the income statement in 2025. The interest element is realised in the income statement each year. At 31st March 2018, 99% (2017: 99%) of the group's net debt and 90% (2017: 92%) of the parent company's net debt were at fixed rates with an average interest rate of 3.1% (2017: 3.1%). 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 an immaterial impact on the group's profit before tax.

31d Fair value of financial instruments

The fair value of financial instruments is approximately equal to book value except for:

Group	2018 Carrying amount £ million	2018 Fair value £ million	2017 Carrying amount £ million	2017 Fair value £ million
US Dollar Bonds 2022, 2023, 2025 and 2028	**(448)**	**(420)**	(507)	(503)
Euro Bonds 2021 and 2023	**(104)**	**(118)**	(103)	(120)
Euro EIB loan 2019	**(109)**	**(113)**	(107)	(112)
Sterling Bonds 2024	**(65)**	**(71)**	(65)	(74)
KfW US dollar loan 2024	**(36)**	**(35)**	(40)	(42)

Parent company	2018 Carrying amount £ million	2018 Fair value £ million	2017 Carrying amount £ million	2017 Fair value £ million
Amounts receivable from subsidiaries	**2,162**	**2,232**	2,028	2,145
Amounts payable to subsidiaries	**(2,687)**	**(2,701)**	(2,801)	(2,829)
US Dollar Bonds 2022, 2023, 2025 and 2028	**(448)**	**(420)**	(507)	(503)
Euro Bonds 2021 and 2023	**(104)**	**(118)**	(103)	(120)
Euro EIB loan 2019	**(109)**	**(113)**	(107)	(112)
Sterling Bonds 2024	**(65)**	**(71)**	(65)	(74)
KfW US dollar loan 2024	**(36)**	**(35)**	(40)	(42)

The fair values are calculated using level 2 inputs (note 30) by discounting future cash flows to net present values using appropriate market interest rates prevailing at the year end.

There were no transfers of any financial instrument between the levels of the fair value hierarchy (note 30) during the year.

31 Financial risk management (continued)

31e 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 2018, the group and parent company had borrowings under committed bank facilities of nil (2017: nil). The group and parent company also have a number of uncommitted facilities, including metal leases, and overdraft lines at their disposal.

	Group 2018 £ million	Group 2017 £ million	Parent company 2018 £ million	Parent company 2017 £ million
Undrawn committed bank facilities				
Expiring in more than one year but not more than two years	**362**	399	**362**	399
Expiring in more than two years	**148**	100	**148**	100
	510	499	**510**	499

The maturity analyses for financial liabilities showing the remaining contractual undiscounted cash flows, including future interest payments, are:

Group as at 31st March 2018	**Within 1 year £ million**	**1 to 2 years £ million**	**2 to 5 years £ million**	**After 5 years £ million**	**Total £ million**
Bank overdrafts	**53**	**–**	**–**	**–**	**53**
Bank and other loans – principal	**10**	**109**	**375**	**461**	**955**
Bank and other loans – interest payments	**26**	**24**	**55**	**34**	**139**
Financial liabilities in trade and other payables	**952**	**1**	**2**	**–**	**955**
Total non-derivative financial liabilities	**1,041**	**134**	**432**	**495**	**2,102**
Foreign exchange forwards and swaps – payments	**736**	**28**	**–**	**–**	**764**
Foreign exchange forwards and swaps – receipts	**(727)**	**(28)**	**–**	**–**	**(755)**
Total derivative financial liabilities	**9**	**–**	**–**	**–**	**9**

Group as at 31st March 2017	Within 1 year £ million	1 to 2 years £ million	2 to 5 years £ million	After 5 years £ million	Total £ million
Bank overdrafts	32	–	–	–	32
Bank and other loans – principal	20	2	232	760	1,014
Bank and other loans – interest payments	34	26	70	55	185
Financial liabilities in trade and other payables	890	–	2	1	893
Total non-derivative financial liabilities	976	28	304	816	2,124
Foreign exchange forwards and swaps – payments	991	–	–	–	991
Foreign exchange forwards and swaps – receipts	(977)	–	–	–	(977)
Total derivative financial liabilities	14	–	–	–	14

Parent company as at 31st March 2018	**Within 1 year £ million**	**1 to 2 years £ million**	**2 to 5 years £ million**	**After 5 years £ million**	**Total £ million**
Bank overdrafts	**11**	**–**	**–**	**–**	**11**
Bank and other loans – principal	**4**	**109**	**375**	**461**	**949**
Bank and other loans – interest payments	**25**	**24**	**55**	**34**	**138**
Financial liabilities in trade and other payables	**2,539**	**–**	**1**	**489**	**3,029**
Total non-derivative financial liabilities	**2,579**	**133**	**431**	**984**	**4,127**
Foreign exchange forwards and swaps – payments	**789**	**29**	**–**	**–**	**818**
Foreign exchange forwards and swaps – receipts	**(783)**	**(29)**	**–**	**–**	**(812)**
Total derivative financial liabilities	**6**	**–**	**–**	**–**	**6**

Notes on the accounts

for the year ended 31st March 2018

31 Financial risk management (continued)

31e Liquidity risk (continued)

Parent company as at 31st March 2017	Within 1 year £ million	1 to 2 years £ million	2 to 5 years £ million	After 5 years £ million	Total £ million
Bank overdrafts	16	–	–	–	16
Bank and other loans – principal	2	2	232	760	996
Bank and other loans – interest payments	30	26	70	55	181
Financial liabilities in trade and other payables	2,574	–	2	506	3,082
Total non-derivative financial liabilities	2,622	28	304	1,321	4,275
Foreign exchange forwards and swaps – payments	1,050	2	–	–	1,052
Foreign exchange forwards and swaps – receipts	(1,038)	(2)	–	–	(1,040)
Total derivative financial liabilities	12	–	–	–	12

31f Offsetting financial assets and liabilities

The group and parent company only offset financial assets and liabilities when they currently have a legally enforceable right to offset the recognised amounts and they intend to either settle on a net basis or realise the asset and settle the liability simultaneously. The following financial assets and liabilities are subject to offsetting, enforceable master netting arrangements or similar agreements:

Group as at 31st March 2018	**Gross financial assets / (liabilities) £ million**	**Amounts set off £ million**	**Net amounts in balance sheet £ million**	**Related amounts not set off £ million**	**Net £ million**
Cash and cash equivalents – cash and deposits	**396**	**(67)**	**329**	**–**	**329**
Other financial assets	**15**	**–**	**15**	**(7)**	**8**
Cash and cash equivalents – bank overdrafts	**(120)**	**67**	**(53)**	**–**	**(53)**
Other financial liabilities	**(12)**	**–**	**(12)**	**7**	**(5)**

Group as at 31st March 2017	Gross financial assets / (liabilities) £ million	Amounts set off £ million	Net amounts in balance sheet £ million	Related amounts not set off £ million	Net £ million
Cash and cash equivalents – cash and deposits	401	(71)	330	–	330
Other financial assets	8	–	8	(7)	1
Cash and cash equivalents – bank overdrafts	(103)	71	(32)	–	(32)
Other financial liabilities	(15)	–	(15)	7	(8)

Parent company as at 31st March 2018	**Gross financial assets / (liabilities) £ million**	**Amounts set off £ million**	**Net amounts in balance sheet £ million**	**Related amounts not set off £ million**	**Net £ million**
Cash and cash equivalents – cash and deposits	**254**	**(36)**	**218**	**–**	**218**
Other financial assets	**15**	**–**	**15**	**(7)**	**8**
Cash and cash equivalents – bank overdrafts	**(47)**	**36**	**(11)**	**–**	**(11)**
Other financial liabilities	**(14)**	**–**	**(14)**	**7**	**(7)**

Parent company as at 31st March 2017	Gross financial assets / (liabilities) £ million	Amounts set off £ million	Net amounts in balance sheet £ million	Related amounts not set off £ million	Net £ million
Cash and cash equivalents – cash and deposits	267	(19)	248	–	248
Other financial assets	8	–	8	(8)	–
Cash and cash equivalents – bank overdrafts	(35)	19	(16)	–	(16)
Other financial liabilities	(16)	–	(16)	8	(8)

31 Financial risk management (continued)

31g 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 over the year) of 20% to ensure focus on efficient use of the group's capital. See the section on return on invested capital in the Financial Review. 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.

Net debt (including post-tax pension deficits) is reduced for the quoted bonds purchased to fund the UK pension deficit. Since the UK pension plan is in surplus, the pension deficits do not include the UK plan and, therefore, an amendment has been made to the definition of net debt (including post-tax pension deficits) to reduce it for these bonds (net of the related deferred tax) only when the UK pension plan is in deficit.

	2018 £ million	2017 £ million
Average net debt	**923**	879
Average equity	**2,276**	1,937
Average capital employed	**3,199**	2,816
Net debt	**(679)**	(716)
Pension deficits	**(56)**	(56)
Related deferred taxation	**10**	13
Net debt (including post-tax pension deficits)	**(725)**	(759)
Profit for the year	**298**	385
Add back:		
Depreciation and amortisation	**175**	172
Income tax expense	**22**	77
Share of loss of joint venture and associate	**1**	–
Net finance costs	**38**	31
Loss on disposal of businesses	**7**	–
Loss on significant legal proceedings	**50**	–
Major impairment and restructuring charges	**90**	–
Earnings before interest, tax, depreciation and amortisation (EBITDA)	**681**	665
Return on invested capital (underlying operating profit (note 4) divided by average capital employed)	**16.4%**	18.2%
Net debt (including post tax pension deficits) to EBITDA	**1.1 times**	1.1 times

32 Provisions and contingent liabilities

32a Group provisions

	Restructuring provisions £ million	Warranty and technology provisions £ million	Other provisions £ million	Total £ million
At 1st April 2017	12	11	16	39
Charge for year	14	2	28	44
Utilised	(10)	–	(13)	(23)
Released	(1)	(3)	(2)	(6)
Disposal of businesses (note 5)	–	(1)	–	(1)
Exchange adjustments	–	–	(2)	(2)
At 31st March 2018	**15**	**9**	**27**	**51**

Notes on the accounts

for the year ended 31st March 2018

32 Provisions and contingent liabilities (continued)

32a Group provisions (continued)

	2018 £ million	2017 £ million
Current	**37**	21
Non-current	**14**	18
Total provisions	**51**	39

The restructuring provisions arise across the group and the majority are expected to be fully utilised by 31st March 2019.

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 Clean Air, Efficient Natural Resources and New Markets. Warranties generally cover a period of up to three years.

The other provisions include environmental, onerous contract 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 utilised within the next 15 years.

The group has recognised a charge in connection with the resolution of a contract dispute lawsuit related to a component supplied by the group in the US (note 6). At 31st March 2018, there is a provision of £18 million in respect of this settlement agreement which is estimated to be fully utilised over the next two years.

32b Group contingent liabilities

Johnson Matthey has been informed of failures in certain engine systems for which the group supplied a particular coated substrate as a component for emissions after-treatment. The extent to which, if any, the reported failures are due to the coated substrate supplied by Johnson Matthey group companies has not been demonstrated. Potential solutions for the reported engine system issues and any associated costs have not yet been notified to the group. Johnson Matthey has not been contacted by any regulatory authority and no Johnson Matthey group company has been served with any contract dispute lawsuit, nor has any formal claim for recovery of identified costs been made at this point. Having reviewed its contractual obligations and the information currently available to it, the group believes that were it to be served with a contract dispute lawsuit, it would have defensible warranty positions in respect of its supplies of coated substrate for the after-treatment systems in the affected engines. If required, it will vigorously assert its available contractual protections and defences. The outcome of any discussions is not certain, nor is the group able to make a reliable estimate of the possible financial impact at this stage, if any.

32c Parent company

	Restructuring provisions £ million	Other provisions £ million	Total £ million
At 1st April 2017	2	20	22
Charge for year	4	2	6
Utilised	(2)	(4)	(6)
At 31st March 2018	**4**	**18**	**22**

	2018 £ million	2017 £ million
Current	**5**	4
Non-current	**17**	18
Total provisions	**22**	22

The restructuring provisions are expected to be fully utilised by 31st March 2019.

The other provisions include onerous contracts, legal provisions 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 31a.

Notes on the accounts

for the year ended 31st March 2018

33 Deferred taxation

33a Group

	Property, plant and equipment £ million	Post-employment benefits £ million	Provisions £ million	Inventories £ million	Intangibles £ million	Other £ million	Total deferred tax (assets) / liabilities £ million
At 1st April 2016	52	(2)	(17)	(13)	38	19	77
(Credit) / charge to income	(5)	8	(1)	1	(9)	14	8
Acquisitions (note 37)	–	–	(1)	–	–	(1)	(2)
Tax on items taken directly to or transferred from equity	–	(2)	–	–	–	1	(1)
Exchange adjustments	7	(4)	(3)	(1)	5	1	5
At 31st March 2017	54	–	(22)	(13)	34	34	87
(Credit) / charge to income	(29)	(3)	(5)	2	(11)	(24)	(70)
Tax on items taken directly to or transferred from equity	–	31	–	–	–	–	31
Exchange adjustments	(4)	2	2	1	(2)	(1)	(2)
At 31st March 2018	**21**	**30**	**(25)**	**(10)**	**21**	**9**	**46**

	2018 £ million	2017 £ million
Deferred tax assets	**(48)**	(26)
Deferred tax liabilities	**94**	113
	46	87

Deductible temporary differences, unused tax losses and unused tax credits not recognised on the balance sheet total £147 million (2017: £120 million) of which £40 million is expected to expire within 5 years, £5 million within 5 to 10 years and £102 million carry no expiry date.

Deferred tax liabilities have not been recognised on temporary differences of £1,416 million (2017: £1,328 million) associated with investments in subsidiaries.

33b Parent company

	Property, plant and equipment £ million	Post-employment benefits £ million	Provisions £ million	Inventories £ million	Other £ million	Total deferred tax liabilities £ million
At 1st April 2016	8	25	–	(7)	9	35
(Credit) / charge to income	(6)	3	(1)	–	(1)	(5)
Tax on items taken directly to or transferred from equity	–	(3)	–	–	–	(3)
At 31st March 2017	2	25	(1)	(7)	8	27
(Credit) / charge to income	(6)	3	(1)	2	1	(1)
Tax on items taken directly to or transferred from equity	–	17	–	–	–	17
At 31st March 2018	**(4)**	**45**	**(2)**	**(5)**	**9**	**43**

Deductible temporary differences, unused tax losses and unused tax credits not recognised on the balance sheet are £2 million (2017: £2 million) and have no expiry date.

Notes on the accounts

for the year ended 31st March 2018

34 Share capital

	Number	£ million
Issued and fully paid ordinary shares		
At 1st April 2016, 31st March 2017 and 31st March 2018	**198,940,606**	**221**

Details of outstanding allocations under the company's long-term incentive plans and awards under the deferred bonus which have yet to mature are disclosed in note 16.

At the last annual general meeting on 28th July 2017, shareholders approved a resolution for the company to make purchases of its own shares up to a maximum number of 19,353,343 ordinary shares of 110⁴⁹⁄₅₃ pence each. 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 long term incentive plans. At 31st March 2018, the ESOT held 1,560,224 shares (2017: 1,743,333 shares) which had not yet vested unconditionally to employees. Computershare Trustees (CI) Limited, as trustee for the ESOT, has waived its dividend entitlement.

The total number of treasury shares held was 5,407,176 (2017: 5,407,176) at a total cost of £92 million (2017: £92 million).

35 Tax effects relating to other comprehensive income

	2018			2017		
	Before tax £ million	**Tax £ million**	**Net of tax £ million**	Before tax £ million	Tax £ million	Net of tax £ million
Currency translation differences	**(95)**	**1**	**(94)**	165	–	165
Cash flow hedges	**5**	**(1)**	**4**	(2)	–	(2)
Fair value gains / (losses) on net investment hedges taken to equity	**6**	**–**	**6**	(21)	–	(21)
Fair value gains on available-for-sale investments	**–**	**–**	**–**	7	–	7
Remeasurements of post-employment benefit assets and liabilities	**103**	**(18)**	**85**	(18)	4	(14)
Tax rate adjustments	**–**	**(13)**	**(13)**	–	(2)	(2)
Total other comprehensive income	**19**	**(31)**	**(12)**	131	2	133

The US federal tax rate was reduced from 35% to 21% with effect from 1st January 2018. In line with this change, the rate applying to US deferred tax assets and liabilities at 31st March 2018 has been reduced from 37% to 23% (including state taxes), creating a US tax rate adjustment which is partly reflected in the Consolidated Income Statement and partly in the Consolidated Statement of Total Comprehensive Income.

36 Other reserves

36a Group

	Capital redemption reserve £ million	Foreign currency translation £ million	Available-for-sale reserve £ million	Hedging reserve £ million	Total other reserves £ million
At 1st April 2016	7	–	–	(9)	(2)
Cash flow hedges – losses taken to equity	–	–	–	(8)	(8)
Cash flow hedges – transferred to income statement	–	–	–	6	6
Fair value losses on net investment hedges taken to equity	–	(21)	–	–	(21)
Fair value gains on available-for-sale investments	–	–	5	–	5
Fair value losses on available-for-sale investments transferred to income statement	–	–	2	–	2
Currency translation differences on foreign currency net investments and related loans taken to equity	–	165	–	–	165
At 31st March 2017	7	144	7	(11)	147
Cash flow hedges – losses taken to equity	–	–	–	(3)	(3)
Cash flow hedges – transferred to income statement	–	–	–	8	8
Fair value gains on net investment hedges taken to equity	–	6	–	–	6
Currency translation differences on foreign currency net investments and related loans taken to equity	–	(95)	–	–	(95)
Tax on items taken directly to or transferred from equity	–	1	–	(1)	–
At 31st March 2018	**7**	**56**	**7**	**(7)**	**63**

Cash flow hedges transferred to the income statement are included in:

	2018 £ million	2017 £ million
Revenue	**(7)**	9
Cost of sales	**15**	(3)
	8	6

36b Parent company

	Capital redemption reserve £ million	Foreign currency translation £ million	Available-for-sale reserve £ million	Hedging reserve £ million	Total other reserves £ million
At 1st April 2016	7	(3)	3	(8)	(1)
Cash flow hedges – losses taken to equity	–	–	–	(3)	(3)
Cash flow hedges – transferred to income statement	–	–	–	1	1
Currency translation differences on foreign operations taken to equity	–	2	–	–	2
At 31st March 2017	7	(1)	3	(10)	(1)
Cash flow hedges – losses taken to equity	–	–	–	(5)	(5)
Cash flow hedges – transferred to income statement	–	–	–	9	9
Currency translation differences on foreign operations taken to equity	–	(3)	–	–	(3)
At 31st March 2018	**7**	**(4)**	**3**	**(6)**	**–**

Notes on the accounts

for the year ended 31st March 2018

37 Acquisitions

In the year ended 31st March 2017, the group made two acquisitions relating to the New Markets Sector: on 1st April 2016, 100% of the share capital of MIOX Corporation, a developer and supplier of advanced water disinfectant technology and, on 31st May 2016, 100% of the share capital of Finex Oy, a supplier of advanced polymer resin technology.

The fair value of the combined net assets acquired was £14 million, consideration paid £21 million and goodwill arising £7 million. The goodwill arising was attributable to opportunities to access expertise and anticipated future synergies and was not expected to be deductible for tax purposes. There were no acquisition fair value amendments to this goodwill in the year ended 31st March 2018.

38 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 2018, precious metal leases were £184 million (2017: £77 million).

39 Commitments

	Group		Parent company	
	2018 £ million	2017 £ million	**2018 £ million**	2017 £ million
Capital lease commitments – future capital expenditure contracted but not provided:				
Property, plant and equipment	**20**	16	**–**	2
Other intangible assets	**15**	3	**5**	–
Operating lease commitments:				
Future minimum amounts payable under non-cancellable operating leases				
Within one year	**16**	19	**3**	3
From one to five years	**41**	38	**8**	9
After five years	**36**	40	**10**	11
	93	97	**21**	23

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.

40 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. The group's joint venture and associate are related parties. Guarantees of subsidiaries' liabilities are disclosed in note 31a.

	Group		Parent company	
	2018 £ million	2017 £ million	**2018 £ million**	2017 £ million
Trading transactions with joint venture: purchases of goods	**–**	5	**–**	5
Trading transactions with associate: rendering of services	**–**	1	**–**	–
Trading transactions with subsidiaries				
Sale of goods	**–**	–	**2,189**	1,848
Purchases of goods	**–**	–	**790**	503
Income from service charges	**–**	–	**47**	35
Amounts receivable from subsidiaries	**–**	–	**295**	198
Amounts payable to subsidiaries	**–**	–	**79**	193
Loans to subsidiaries	**–**	–	**1,867**	1,830
Loans from subsidiaries	**–**	–	**2,608**	2,608

The group's post-employment benefits plans are related parties and the group's and parent company's transactions with them are disclosed in note 17.

40 Transactions with related parties (continued)

Key management personnel

The key management of the group and parent company consist of the Board of Directors and the members of the Group Management Committee (GMC). During the year ended 31st March 2018, the GMC had an average of eight members (2017: ten members). The only transactions with any key management personnel was compensation charged in the year which was:

	2018 £ million	2017 £ million
Short term employee benefits	**6**	6
Share-based payments	**3**	3
Termination benefits	**–**	1
Non-executive directors' fees and benefits	**1**	1
Total compensation of key management personnel	**10**	11

Balances outstanding at the year end were nil (2017: termination benefits of £1 million). Information on the directors' remuneration is given in the Remuneration Report.

41 Related undertakings

A full list of related undertakings at 31st March 2018 (comprising subsidiaries, joint ventures and associates) is set out below. Those held directly by the parent company are marked with an asterisk (*) and those held jointly by the parent company and a subsidiary are marked with a cross (+). All the companies are wholly owned unless otherwise stated. All the related undertakings are involved in the principal activities of the group. Unless otherwise stated, the share class of each related undertaking comprises ordinary shares only.

Entity	Registered address
+Johnson Matthey Argentina S.A.	Tucumán 1 Piso 4, CP 1049, Buenos Aires, Argentina
Johnson Matthey (Aust.) Ltd	64 Lillee Crescent, Tullamarine VIC 3043, Australia
+Johnson Matthey Holdings Limited	64 Lillee Crescent, Tullamarine VIC 3043, Australia
Johnson Matthey Belgium BVBA	Pegasuslaan 5, 1831 Diegem, Belgium
Tracerco Europe BVBA	1731 Zellik, Z3 Doornveld 115, Belgium
The Argent Insurance Co. Limited	Clarendon House, 2 Church Street, Hamilton, HM11, Bermuda
Johnson Matthey Brasil Ltda	Avenida Macuco, 726, 12th Floor, Edifício International Office, CEP04523-001, Brazil
Stepac Brazil Ltda	Rua Itapolis, n° 1921, Pacaembu, São Paulo, 01245-000, Brazil
Tracerco do Brasil – Diagnosticos de Processos Industriais Ltda	Rua Victor Civita, 66, bloco 2, salas 501/502, Condomínio Rio Office Park, Barra da Tijuca, Rio de Janeiro, CEP 22775-044, Brazil
Johnson Matthey Battery Materials Ltd.	280 Liberté Ave, Candiac Québec J5R 6X1, Canada
Tracerco Radioactive Diagnostic Services Canada Inc.	8908 60 Avenue NW, Edmonton AB, T6E 6A6, Canada
Johnson Matthey Argillon (Shanghai) Emission Control Technologies Ltd.	No. 298, East Rong Le Road, Songjiang District, Shanghai, China
Johnson Matthey Battery Materials (Changzhou) Co., Ltd.	1 Xin Wei Liu Road, Changzhou Export Processing Zone, Changzhou, Jiangsu Province, China
Johnson Matthey Chemical Process Technologies (Shanghai) Company Limited	Room 1066, Building 1, No 215 Lian He Bei Lu, Fengxian District, Shanghai, China
Johnson Matthey Clean Energy Technologies (Beijing) Co., Ltd	2007C, 20th Floor, No. 21 Building, No.5 Community, Shu Guang Xi Lane, Chaoyang District, Beijing, China
Johnson Matthey Process Technologies (Beijing) Co., Ltd.	Unit No. 2001-2007A, No. 21 Building, Shuguangxi Lane A5, Chaoyang District, Beijing, China
Johnson Matthey Research & Development (Yantai) Co., Ltd.	No. 9 Wuxi Road, Yantai Economic and Technology Development Zone, Yantai, Shandong Province, China
Johnson Matthey (Shanghai) Catalyst Co., Ltd.	586 Dongxing Road, Songjiang Industry Zone, Shanghai, 201613, China
Johnson Matthey (Shanghai) Chemicals Limited	588 Dongxing Road, Songjiang Industry Zone, Shanghai, 201613, China
Johnson Matthey (Shanghai) Trading Limited	Room 1615B, No. 118 Xinling Road, Waigaoqiao Free Trade Zone, Shanghai, China
Johnson Matthey (Tianjin) Chemical Co., Ltd.	Suite 1-1201, BoRun Commercial Plaza, Tianjin Development Zone, China
Johnson Matthey (Zhangjiagang) Environmental Protection Technology Co., Ltd	Room 807, Changjiang Building, ZJG FTZ, China
Johnson Matthey (Zhangjiagang) Precious Metal Technology Co., Ltd.	Rm. 1116-1117, The Petrochemical Trading Edifice, Zhangjiagang Free Trade Zone, Jiangsu Province, China
Qingdao Johnson Matthey Hero Catalyst Company Limited (51.0%)	New Material Industrial Park, Shiyuan Road, Qinda Industrial Park, Chengyang District, Qingdao, 200331, China

Notes on the accounts

for the year ended 31st March 2018

41 Related undertakings (continued)

Entity	Registered address
Shanghai Bi Ke Clean Energy Technology Co Ltd (11.1%)	Room 427 Building 2 No 351 Guo Shou Jing Road, China (Shanghai) Pilot Free Trade Zone, China
Shanghai Johnson Matthey Applied Materials Technologies Co., Ltd	Area A, 1st Floor, Building 7, 298 East Rong Le Road, Songjiang District, Shanghai, China
Tracerco China Process Diagnostics & Instrumentation (Shanghai) Co., Ltd.	Section G Floor 2, Building 7, No 298 Rong Le East Road, Songjiang Industry Zone, Shanghai, China
Johnson Matthey A/S	Frederikssundvej 274D, DK-2700 Brønshøj, Copenhagen, Denmark
*AG Holding Ltd	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Cascade Biochem Limited [1]	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Fuel Cell Today Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Ilumink Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*JMEPS Trustees Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Johnson Matthey Battery Systems Engineering Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Johnson Matthey (CM) Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Johnson Matthey Davy Technologies International Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Johnson Matthey Davy Technologies Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Johnson Matthey Fuel Cells Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Johnson Matthey Investments Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Johnson Matthey (Nominees) Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Johnson Matthey Precious Metals Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Johnson Matthey South Africa Holdings Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Johnson Matthey Tianjin Holdings Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Katalco Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Matthey Finance Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Matthey Holdings Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Synetix Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
*Tracerco Limited	5th Floor, 25 Farringdon Street, London, EC4A 4AB, England
Finex Oy	Seppolantie 1, Kotka, 48230, Finland
Johnson Matthey Finland Oy	Autokatu 6, 20380 Turku, Finland
Kiinteistö Oy Kotkan Huumantie 5 (70.0%)	c/o Finex Oy, Seppolantie 1, Kotka, 48230, Finland
Johnson Matthey SAS	Les Diamants – Immeuble B, 41 rue Delizy, 93500 Pantin, France
Johnson Matthey Battery Materials GmbH	Ostenriederstr. 15, 85368 Moosburg a.d. Isar, Germany
Johnson Matthey Catalysts (Germany) GmbH	Bahnhofstrasse 43, 96257 Redwitz an der Rodach, Germany
Johnson Matthey Chemicals GmbH	Wardstrasse 17, D-46446 Emmerich am Rhein, Germany
Johnson Matthey GmbH & Co. KG [2]	Otto-Volger-Strasse 9b, 65843 Sulzbach, Germany
Johnson Matthey Holding GmbH	Bahnhofstrasse 43, 96257 Redwitz an der Rodach, Germany
Johnson Matthey Management GmbH	Otto-Volger-Strasse 9b, 65843 Sulzbach, Germany
Johnson Matthey Piezo Products GmbH	Bahnhofstrasse 43, 96257 Redwitz an der Rodach, Germany
Johnson Matthey Redwitz Real Estate (Germany) B.V. & Co. KG [2]	Bahnhofstrasse 43, 96257 Redwitz an der Rodach, Germany
Johnson Matthey Argillon Power Plant Catalysts Holdings (Hong Kong) Limited	Unit 2-6, 8/F, 909 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon, Hong Kong
Johnson Matthey Hong Kong Limited	Unit 2-6, 8/F, 909 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon, Hong Kong
Johnson Matthey Pacific Limited [3]	Unit 2-6, 8/F, 909 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon, Hong Kong
Johnson Matthey Process Technologies Holdings Hong Kong Limited	Unit 2-6, 8/F, 909 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon, Hong Kong
Johnson Matthey Tracerco Holdings Hong Kong Limited	Unit 2-6, 8/F, 909 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon, Hong Kong
Johnson Matthey Yantai Holdings (Hong Kong) Limited	Unit 2-6, 8/F, 909 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon, Hong Kong
Macfarlan Smith (Hong Kong) Limited	Unit 2-6, 8/F, 909 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon, Hong Kong
Johnson Matthey Chemicals India Private Limited	Plot No 6A, MIDC Industrial Estate, Taloja, District Raigad, Maharashtra 410208, India
Johnson Matthey India Private Limited	103, Ashoka Estate, 24, Barakhamba Road, New Delhi – 110 001, India

41 Related undertakings (continued)

Entity	Registered address
Johnson Matthey Limited	24/26 City Quay, Dublin 2, D02 NY19, Ireland
Stepac L.A. Ltd.	Tefen Industrial Park Bldg. #12, Post Box 73, Tefen, Western Galilee, 2495900, Israel
Johnson Matthey Italia S.r.l.	No 2, Via Talucchi, Turin, Italy
Johnson Matthey Fuel Cells Japan Limited	5123-3 Kitsuregawa, Sakura-shi, Tochigi, 329-1412, Japan
Johnson Matthey Japan Godo Kaisha	5123-3 Kitsuregawa, Sakura-shi, Tochigi, 329-1412, Japan
Johnson Matthey DOOEL Skopje	TIDZ Skopje 1, 1041 Ilinden, Macedonia
*Johnson Matthey Sdn. Bhd.	Suite 16-10, Level 16, Wisma UOA II, 21 Jalan Pinang, 50450 Kuala Lumpur, Malaysia
Johnson Matthey Services Sdn. Bhd.	Suite 16-10, Level 16, Wisma UOA II, 21 Jalan Pinang, 50450 Kuala Lumpur, Malaysia
Tracerco Asia Sdn. Bhd.	Suite 16-10, Level 16, Wisma UOA II, 21 Jalan Pinang, 50450 Kuala Lumpur, Malaysia
Tracerco Asia Services Sdn. Bhd.	Suite 16-10, Level 16, Wisma UOA II, 21 Jalan Pinang, 50450 Kuala Lumpur, Malaysia
Johnson Matthey de Mexico, S. de R.L. de C.V.	Av. de Margues y Av. de la Canada, 2a Etapa Parque Industrial Bernardo Quintana, El Marques, Querataro C.P., 76246, Mexico
Johnson Matthey Servicios, S. de R.L. de C.V.	Av Ramon Rivera Lara 6620, Parque Industrial Juarez, Chihuahua, Mexico
Intercat Europe B.V.	Stationsstraat 50, 3451 BZ, Vleuten, Netherlands
Johnson Matthey Advanced Glass Technologies B.V.	Fregatweg 38, 6222 NZ Maastricht, Netherlands
Johnson Matthey B.V.	Otto-Volger-Strasse 9b, 65843 Sulzbach/Ts. Germany
Johnson Matthey Holdings B.V.	Fregatweg 38, 6222 NZ Maastricht, Netherlands
Johnson Matthey Netherlands B.V.	Fregatweg 38, 6222 NZ Maastricht, Netherlands
Johnson Matthey Netherlands 2 B.V.	Fregatweg 38, 6222 NZ Maastricht, Netherlands
Matthey Finance B.V.[1]	Fregatweg 38, 6222 NZ Maastricht, Netherlands
Tracerco Norge AS	Kokstadflaten 35, 5257 Kokstad, Norway
Johnson Matthey Battery Systems Spólka z ograniczoną odpowiedzialnocścią	PL 44-109 Gliwice, ul. Einsteina 36, Poland
Johnson Matthey Poland Spólka z ograniczoną odpowiedzialnocścią	Złota 59, 00-120 Warszawa, Warsaw, Poland
Macfarlan Smith Portugal, Lda	Largo de São Carlos 3, 1200-410 Lisboa, Portugal
Johnson Matthey Catalysts LLC	1 Transportny Proezd, 660027 Krasnoyarsk, Russia
International Diol Company (4.3%)	1st Basic Industrial Road 218, P.O. Box 12021, Jubail Industrial City, 31961, Saudi Arabia
*Anipel Limited	10 Wheatfield Road, Edinburgh, Midlothian, EH11 2QA, Scotland
*Bitrex Limited	10 Wheatfield Road, Edinburgh, Midlothian, EH11 2QA, Scotland
*Johnson Matthey General Partner (Scotland) Limited	10 Wheatfield Road, Edinburgh, Midlothian, EH11 2QA, Scotland
*Johnson Matthey (Scotland) Limited Partnership[2]	10 Wheatfield Road, Edinburgh, Midlothian, EH11 2QA, Scotland
Macfarlan Smith Limited	Wheatfield Road, Edinburgh, Midlothian, EH11 2QA, Scotland
*Meconic Limited	10 Wheatfield Road, Edinburgh, Midlothian, EH11 2QA, Scotland
Johnson Matthey Singapore Private Limited	80 Robinson Road, #02-00 Singapore 068898
Johnson Matthey (Proprietary) Limited	Corner Henderson and Premier Roads, Germiston South Ext 7, Gauteng, South Africa
Johnson Matthey Research South Africa (Proprietary) Limited	Corner Henderson and Premier Roads, Germiston South Ext 7, Gauteng, South Africa
Johnson Matthey Salts (Proprietary) Limited	Corner Henderson and Premier Roads, Germiston South Ext 7, Gauteng, South Africa
Johnson Matthey Catalysts Korea Limited	A-dong 2906-ho, 13 Heungdeok 1-ro, Giheung-gu, Yongin-si, Gyeonggi-do, South Korea
Johnson Matthey Korea Limited	418, Ideok-ro, Iwol-myeon, Jincheon-gun, Chungcheongbuk-do, South Korea
Johnson Matthey AB	Viktor Hasselblads gata 8, 421 31 Västra Frölunda, Göteborg, Sweden
Johnson Matthey Formox AB	SE-284 80, Perstorp, Sweden
Johnson Matthey & Brandenberger AG	Glatttalstrasse 18, 8052 Zurich, Switzerland
Johnson Matthey Finance GmbH	Hertensteinstrasse 51, 6004 Lucerne, Switzerland
Johnson Matthey Finance Zurich GmbH	Glatttalstrasse 18, 8052 Zurich, Switzerland
LiFePO4+C Licensing AG	Hertensteinstrasse 51, 6004 Lucerne, Switzerland

Notes on the accounts

for the year ended 31st March 2018

41 Related undertakings (continued)

Entity	Registered address
Johnson Matthey (Thailand) Limited	1858/12 Interlink Tower, 5th Floor, Bangna-Trad Road, Bangna Sub-District, Bangna District, Bangkok, Thailand
Johnson Matthey Holdings (Thailand) Limited	1858/12 Interlink Tower, 5th Floor, Bangna-Trad Road, Bangna Sub-District, Bangna District, Bangkok, Thailand
Johnson Matthey Services (Trinidad and Tobago) Limited	Queen's Park Place, 17-20 Queens Park West, Port of Spain, Trinidad and Tobago
Stepac Ambalaj Malzemeleri Sanayi Ve Ticaret Anonim Sirketi	Güzeloba Mah. Rauf Denktaş Cad., No.56/101, Muratpaşa/Antalya, Turkey
JM Holdings UK LLC	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
JM Holdings US LLC	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey Fuel Cells, Inc.	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey Holdings, Inc.	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey Inc.[4]	Corporation Service Company, 2595 Interstate Drive, Suite 103 PA 17110, USA
Johnson Matthey Japan, Inc.	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey Materials, Inc.	CSC Lawyers Incorporating Service, 2730 Gateway Oaks Drive, Suite 100, Sacramento CA 95833, USA
Johnson Matthey North America, Inc.	Corporation Trust Center, 1209 Orange Street, Wilmington DE 19801, USA
Johnson Matthey Overseas Holdings Inc.	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey Pharmaceutical Materials, Inc.	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey Process Technologies, Inc.	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey Stationary Emissions Control LLC	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Johnson Matthey US 2 LLC	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Matthey Pharmaceutical Alkaloids, LLC (50.0%)	Corporation Trust Center, 1209 Orange Street, Wilmington DE 19801, USA
MIOX Corporation	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA
Red Maple LLC (50.0%)	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington DE 19808, USA

In some jurisdictions in which the group operates, share classes are not defined and in these instances, for the purpose of disclosure, these holdings have been classified as ordinary shares.

[1] Ordinary and preference shares
[2] Limited partnership, no share capital
[3] Ordinary and non-cumulative redeemable preference shares
[4] Ordinary and series A preferred stock

Reconciliation of non-GAAP measures to GAAP measures

for the year ended 31st March 2018

The group uses various measures to manage its business which are not defined by generally accepted accounting principles (GAAP). The group's management believes these measures provide valuable additional information to users of the accounts in understanding the group's performance.

Sales excluding precious metals (sales)

The group believes that sales excluding precious metals is a better measure of the underlying performance of the group than revenue. Total revenue can be heavily distorted by year on year fluctuations in the market prices of precious metals. In addition, in many cases, the value of precious metals is passed directly on to our customers.

Underlying profit and earnings

These are the equivalent GAAP measures adjusted to exclude amortisation of acquired intangibles, major impairment and restructuring charges, profit or loss on disposal of businesses, gain or loss on significant legal proceedings together with associated legal costs, significant tax rate changes and, where relevant, related tax effects. The group believes that these measures provide a better guide to the underlying performance of the group. These are reconciled in note 4.

Margin

Underlying operating profit divided by sales excluding precious metals.

Working capital days

Non-precious metal related inventories, trade and other receivables and trade and other payables (including any classified as held for sale) divided by sales excluding precious metals for the last three months multiplied by 90 days.

Free cash flow

Net cash flow from operating activities, after net interest paid, net purchases of non-current assets and investments and dividends received from joint venture.

Capex

Additions of property, plant and equipment plus additions of other intangible assets.

Capex to depreciation ratio

Capex divided by depreciation. Depreciation is the depreciation charge of property, plant and equipment plus the amortisation charge of other intangible assets excluding amortisation of acquired intangibles (note 7).

Working capital (excluding precious metals)

	2018 £ million	2017 £ million
Inventories	**783**	772
Trade and other receivables	**1,228**	1,139
Trade and other payables	**(1,012)**	(968)
Total working capital	**999**	943
Less precious metal working capital	**(404)**	(335)
Working capital (excluding precious metals)	**595**	608

Free cash flow

	2018 £ million	2017 £ million
Net cash flow from operating activities	**386**	523
Dividends received from joint venture	**1**	–
Interest received	**3**	5
Interest paid	**(45)**	(42)
Purchases of non-current assets and investments	**(216)**	(260)
Proceeds from sale of non-current assets and investments	**7**	4
Free cash flow	**136**	230

Other

Other non-GAAP measures are reconciled in the relevant note.

Accounts

Independent auditor's report

to the members of Johnson Matthey Plc

KPMG

1. Our opinion is unmodified

We have audited the accounts of Johnson Matthey Plc ("the company") for the year ended 31st March 2018 which comprise the Consolidated Income Statement, Consolidated Statement of Comprehensive Income, Consolidated and Parent Company Balance Sheets, Consolidated and Parent Company Cash Flow Statements, Consolidated and Parent Company Statement of Changes in Equity, and the related notes, including the Accounting Policies.

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 2018 and of the group's profit for the year then ended;

– the group accounts have been properly prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (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.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion. Our audit opinion is consistent with our report to the Audit Committee.

We were appointed as auditor by the shareholders in 1985. The period of total uninterrupted engagement is for the 33 financial years ended 31st March 2018. We have fulfilled our ethical responsibilities under, and we remain independent of the group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

Overview		
Materiality: group accounts as a whole	£23 million (2017: £22 million) 5% (2017: 5%) of adjusted profit before tax	
Coverage	83% (2017: 84%) of group profit before tax	
Risks of material misstatement		**vs 2017**
Recurring risks	Refinery process and stock takes	◀▶
	Taxation accounting	◀▶
	New: Product claims and uncertainties	▲
	Carrying value of goodwill and other intangibles	▼

2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the accounts and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. We summarise below the key audit matters (changed from 2017 to include product claims and uncertainties and to remove post-employment benefits), in decreasing order of significance, in arriving at our audit opinion above, together with our key audit procedures to address those matters and, as required for public interest entities, our results from those procedures. These matters were addressed, and our results are based on procedures undertaken, in the context of, and solely for the purpose of, our audit of the accounts as a whole, and in forming our opinion thereon, and consequently are incidental to that opinion, and we do not provide a separate opinion on these matters.

	The risk	Our response
Group and company **Refinery process and stock takes** The group refines over four million ounces of platinum group metals per annum with a market value of £3.4 billion. *Refer to page 105 (Audit Committee Report) and page 148 (accounting policy).*	**Physical quantities:** The group refines a significant amount of metal as set out in note 1. The year end metal inventory quantity is determined from: (i) assay estimates of the metal contained in the carrier material entering and refined metal leaving the refining process, and (ii) estimates of process losses, rolled forward from (iii) assay estimates of the metal content in the plants at the time of stock takes which take place at different times earlier than the financial year end. Furthermore, the plants process material on behalf of third parties, whereby the group must return pre-agreed recoverable quantities of refined metal to those parties; under or over recovery or other loss directly impacts the group's own metal inventory. A full stock take was not performed at the UK refineries during the year which led to an increased period between the previous stock take and the financial year end. The year end metal inventory is dependent upon the physical quantities measured in the assay samples in (i) and (iii). The risks are such that a small variation in estimates could have a material effect on the valuation of inventory in the accounts.	Our procedures included: – **Control observations:** Assessing through observation, interview and reperformance on a sample basis the adequacy of group controls over the assay system, metal processing and inventory including physical security, metal receipt and dispatch, metal recording, reconciling the production and accounting systems, assaying and stock takes; – **Count attendance and design:** Attending certain physical stock takes to verify the design and implementation of stock take processes and physical quantities counted; – **Count vs system reconciliation:** Seeking to understand and corroborate the reasons for significant or unusual movements in inventory quantities between the accounting records and the physical stock takes; Evaluating the roll forward of inventory from the point of stock take to the year end to assess the potential for misstatement; – **Benchmarking assumptions:** Challenging the assay estimates taken by management by comparing these to assay estimates undertaken by customers and third party umpires; – **Historical comparisons:** Assessing provisions for inventory loss compared to historical trends and stock take results to assess the likelihood and quantum of processing loss (if any) of metal between the date of the stock take and the year end date; and – **Assessing transparency:** Considering the adequacy of the group's disclosures about the degree of estimation involved in arriving at the measured inventory. **Our results:** As a result we found the valuation of inventory to be acceptable (2017: acceptable).
Group and company **Taxation accounting** Tax provisions of £86 million (2017: £89 million). *Refer to page 106 (Audit Committee Report), page 147 (accounting policy) and pages 155-156 (financial disclosures).*	**Subjective estimate:** The group operates in multiple jurisdictions governed by national tax laws and regulations and is required to estimate the tax effect of cross border transactions including transfer pricing arrangements. Where the precise impact of these laws and regulations on indirect taxes and the tax payable on profits arising in those jurisdictions is unclear, the group seeks to make reasonable estimates to determine the tax charge arising.	Our procedures included: – **Our taxation expertise:** With the assistance of our own local and international tax specialists who have knowledge of the relevant indirect and direct tax regimes and experience in their application, analysing and challenging the assumptions used to determine the tax charge and provisioning; and benchmarking assumptions; and assessing correspondence with the relevant tax authorities including the status of tax authority audits and inquiries; and – **Assessing transparency:** Considering the adequacy of the group's disclosures in respect of tax and uncertain tax positions. **Our results:** From the evidence obtained, we found the level of tax provisioning to be acceptable (2017: acceptable).

Independent auditor's report

to the members of Johnson Matthey Plc

2. Key audit matters: our assessment of risks of material misstatement (continued)

	The risk	Our response
Group **Product claims and uncertainties** Provision of £18 million included within other provisions of £27 million. In addition the group has a contingent liability for potential further product claims for which the outcome of any discussions is uncertain, and where the group is unable to make a reliable estimate of any possible financial consequence at this stage. *Refer to page 106 (Audit Committee Report), page 148 (accounting policy) and pages 181-182 (financial disclosures).*	**Subjective estimate:** The group's products are complex and produced to exacting standards. Product quality issues may be identified subsequent to delivery to and installation by customers. Accordingly at any point in time the group may be exposed to product liability issues including claims for damages or compensation. The group holds provisions for the potential costs associated with these risks. The assumptions underpinning these provisions are inherently uncertain. **Dispute outcome:** Where the group is unable to make a reliable estimate of potential exposures it discloses these risks as a contingent liability. Should the group be unable to successfully defend its position, these risks could give rise to a future liability.	Our procedures included: – **Enquiry of lawyers:** Inspection of correspondence with internal and external counsel and formal confirmations from counsel of open cases; – **Test of detail:** In relation to quantified issues, considering the status of discussions with customers, then testing and challenging the basis of the group's calculations including the rectification or remediation cost estimates; and – **Assessing transparency:** Considering the adequacy of the group's disclosures in respect of the loss on significant legal proceedings and contingent liabilities. **Our results:** From the evidence obtained, we found the level of provisioning and disclosure in respect of product claims to be acceptable.
Group **Carrying value of goodwill and other intangible assets** Goodwill of £574 million (2017: £607 million) and other intangible assets of £295 million (2017: £288 million). In the current year there was a pre-tax impairment charge of £11 million against the carrying value of the Water Technologies CGU reflecting lower growth rate assumptions for these businesses. *Refer to page 106 (Audit Committee Report), page 147 (accounting policy) and page 169-170 (financial disclosures).*	**Forecast-based valuation:** The group has significant intangible assets and goodwill arising from the acquisition of businesses and investments in new products and technologies. Some investments and recent acquisitions are still at an early stage of commercial development and as such, carry a greater risk that they will not be commercially viable. Recoverability of these assets is based on forecasting and discounting future cash flows, which are inherently judgemental.	Our procedures included: – **Assessing methodology:** Obtaining the discounted cash flow models and assessing the principles and integrity of each model; – **Benchmarking assumptions:** Challenging the group's valuation assumptions for its cash flow projections such as discount rates and cost inflation, with reference to internally and externally derived sources; – **Our valuations expertise:** Assessing the inputs based on our own insights and experience and challenging the appropriateness of the discount rate with the assistance of our own valuation specialists; – **Sensitivity analysis:** Performing breakeven analysis on the assumptions noted above; – **Historical comparisons:** Assessing the group's historical forecasting accuracy by comparing the group's prior year forecasts with actuals; and – **Assessing transparency:** Considering the adequacy of the group's disclosures in respect of impairment testing and whether disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions properly reflected the risks inherent in the valuations. **Our results:** As a result of our testing we found the resulting estimate of the recoverable amount of goodwill and other intangible assets to be acceptable (2017: acceptable).

We continue to perform procedures over post-employment benefits. However, following our review of our previous year's audit findings, we have not assessed this as one of the most significant risks in our current year audit and, therefore, it is not separately identified in our report for 2018.

3. Our application of materiality and an overview of the scope of our audit

Materiality for the group accounts as a whole was set at £23.0 million (2017: £22.0 million), determined with reference to a benchmark of group profit before tax, excluding the loss on disposal of businesses, the loss on significant legal proceedings and major impairment and restructuring charges as disclosed on the face of the Consolidated Income Statement, of which it represents 5% (2017: 5%). We agreed to report to the Audit Committee any corrected or uncorrected identified profit misstatements exceeding £0.5 million (2017: £0.5 million), in addition to other identified misstatements warranting reporting on qualitative grounds. Materiality for the parent company financial statements as a whole was set at £20 million (2017: £20 million) determined with reference to a benchmark of company total assets, of which it represents 0.4% (2017: 0.4%).

In establishing the overall approach to our audit, we considered the decentralised nature of the group's operations, the risk profile of countries where the group operates, our historical audit findings and changes taking place within the business. We also considered the financial significance and risks associated with each business together with any local statutory audit requirements.

Of the group's 55 (2017: 57) reporting components, we subjected 44 (2017: 44) to audits for group reporting purposes, 8 (2017: 10) to specified risk focused audit procedures over revenue, inventory and receivables and 3 (2017: 3) to specified risk focused audit procedures over inventory, including in China, Germany, India, Macedonia, South Africa, the UK and the US. The components for which we performed specified risk-focused procedures were not individually financially significant enough to require an audit for group reporting purposes, but did present specific individual risks that needed to be addressed. The components within the scope of our work accounted for 89% of group revenue, 83% of group profit before tax and 82% of group total assets.

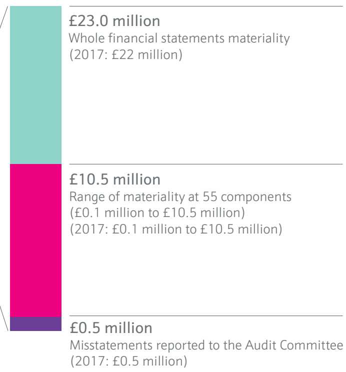
For the remaining components, we performed analysis at an aggregated group level to re-examine our assessment that there were no significant risks of material misstatement within these, including through examining reports from local auditors on the results of their statutory audit work. In total these statutory audits comprise 6% of group revenue, 7% of group profit before tax and 10% of group total assets.

The group audit team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back. The group team approved component materiality, which ranged from £0.1 million to £10.5 million (2017: £0.1 million to £10.5 million), having regard to the mix of size and risk profile of the group across the components. The work on 43 of the 55 components was performed by the component auditors and the rest by the group team.

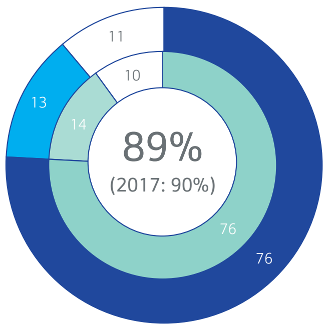
The group audit team visited six component locations (2017: six) in China, Macedonia, South Africa, the Netherlands, the UK and the US to assess the audit risk and strategy. Telephone conference meetings were also held with these component auditors and all others that were not physically visited. At these visits and meetings, the findings reported to the group audit team were discussed in more detail, and any further work required by the group audit team was then performed by the component auditor.

Adjusted profit before tax
£467 million
(2017: £462 million)

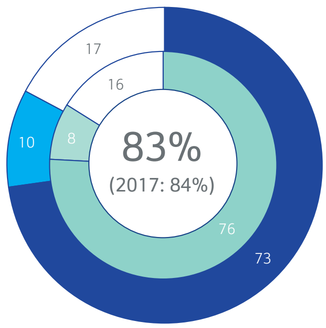
Group Materiality
£23 million
(2017: £22 million)



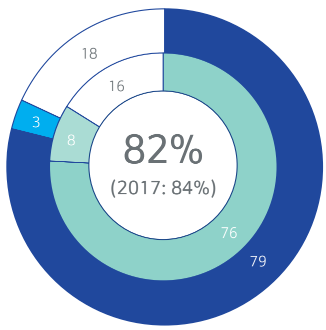
Group revenue



Group profit before tax



Group total assets



Full scope for group audit purposes 2018
Specified risk-focused audit procedures 2018
Full scope for group audit purposes 2017
Specified risk-focused audit procedures 2017
Residual components

Independent auditor's report

to the members of Johnson Matthey Plc

4. We have nothing to report on going concern

We are required to report to you if:

- we have anything material to add or draw attention to in relation to the directors' statement on page 135 on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the group's and company's use of that basis for a period of at least 12 months from the date of approval of the financial statements; or
- the related statement under the Listing Rules set out on page 74 is materially inconsistent with our audit knowledge.

We have nothing to report in these respects.

5. We have nothing to report on the other information in the annual report

The directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

Strategic Report and Directors' Report

Based solely on our work on the other information:

- we have not identified material misstatements in the Strategic Report and the Directors' Report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

Directors' Remuneration Report

The part of the Directors' Remuneration Report to be audited extends from the Single Figure Table of Remuneration on page 123 to, and including, the Statement of directors' shareholding on page 126; and in addition comprises the Explanation of figures on page 124, the Variable pay – additional disclosures, including bases of calculation and outcomes on pages 124 to 125, LTIP outcomes on page 126 and the Pension entitlements on page 126.

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

Disclosures of principal risks and longer term viability

Based on the knowledge we acquired during our financial statements audit, we have nothing material to add or draw attention to in relation to:

- the directors' confirmation within the viability statement that they have carried out a robust assessment of the principal risks facing the group, including those that would threaten its business model, future performance, solvency and liquidity;
- the principal risks disclosures describing these risks and explaining how they are being managed and mitigated; and
- the directors' explanation in the viability statement of how they have assessed the prospects of the group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Under the Listing Rules we are required to review the viability statement. We have nothing to report in this respect.

Corporate governance disclosures

We are required to report to you if:

- we have identified material inconsistencies between the knowledge we acquired during our financial statements audit and the directors' statement that they consider that the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the group's position and performance, business model and strategy; or
- the section of the annual report describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee; or
- a corporate governance statement has not been prepared by the company.

We are required to report to you if the Corporate Governance Statement does not properly disclose a departure from the 11 provisions of the UK Corporate Governance Code specified by the Listing Rules for our review.

We have nothing to report in these respects.

Based solely on our work on the other information described above:

- with respect to the Corporate Governance Statement disclosures about internal control and risk management systems in relation to financial reporting processes and about share capital structures:
  - we have not identified material misstatements therein; and
  - the information therein is consistent with the financial statements; and
- in our opinion, the Corporate Governance Statement has been prepared in accordance with relevant rules of the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority.

6. We have nothing to report on the other matters on which we are required to report by exception

Under the Companies Act 2006, we are required to report to you if, in our opinion:

- parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements 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.

We have nothing to report in these respects.

7. Respective responsibilities

Directors' responsibilities

the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or other irregularities (see below), or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud, other irregularities or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

Irregularities – ability to detect

We identified areas of law and regulation that could reasonably be expected to have a material effect on the financial statements from our experience, through discussion with the directors and other management (as required by auditing standards), and from inspection of the group's regulatory and legal correspondence.

We had regard to laws and regulations in areas that directly affect the financial statements including financial reporting (including related company legislation) and taxation legislation. We considered the extent of compliance with those laws and regulations as part of our procedures on the related financial statement items.

In addition we considered the impact of laws and regulations in the specific areas of health and safety and anti-bribery recognising the nature of the group's activities that may inadvertently affect the financial statements. With the exception of any known or possible non-compliance, and as required by auditing standards, our work in respect of these was limited to enquiry of the directors and other management and inspection of regulatory and legal correspondence. We considered the effect of any known or possible non-compliance in these areas as part of our procedures on the related financial statement items.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. This included communication from the group to component audit teams of relevant laws and regulations identified at group level, with a request to report on any indications of potential existence of non-compliance with relevant laws and regulations (irregularities) in these areas, or other areas directly identified by the component team.

As with any audit, there remained a higher risk of non-detection of irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

8. The purpose of our audit work and to whom we owe our responsibilities

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.

Stephen Oxley (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square
London, E14 5GL

30th May 2018