Independent Auditor's Report to the Members of Croda International Plc

1. Our opinion is unmodified

We have audited the financial statements of Croda International Plc ("the Company") for the year ended 31 December 2020 which comprise the Group Income Statement, the Group Statement of Comprehensive Income, the Group and Company Balance Sheets, the Group Statement of Cash Flows, the Group and Company Statements of Changes in Equity, and the related notes, including the accounting policies on pages 121 to 127 and on page 157.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the parent Company's affairs as at 31 December 2020 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union;
- the parent Company financial statements have been properly prepared in accordance with UK accounting standards, including FRS 101 *Reduced Disclosure Framework;* and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation to the extent applicable.

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 first appointed as auditor by the shareholders on 25 April 2018. The period of total uninterrupted engagement is for the three financial years ended 31 December 2020. 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 financial statements as a whole	£15m (2019: £15m) 5.0% (2019: 4.8%) of normalised Group profit before tax
Coverage	77% (2019: 79%) of the total of the profits and losses that made up Group profit before tax

Key audit matters		vs 2019
Event driven	**New:** Identification and valuation of intangible assets acquired in business combinations	
Recurring risks	Valuation of defined benefit pension scheme obligation	◀▶
	Goodwill impairment	◀▶
	Recoverability of parent Company's intercompany receivables	◀▶

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 financial statements 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, in decreasing order of audit 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 financial statements 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.

Group	The risk	Our response
Identification of and valuation of intangible assets acquired in the business combinations (Valuation of intangible assets acquired of £91.5m in respect of the Avanti business combination and £266.7m in respect of the Iberchem business combination) *Refer to page 74 (Audit Committee Report), page 123 (accounting policy) and note 28 on pages 153 and 154 (financial disclosures).*	**Forecast based assessment:** • On 12 August 2020, the Group completed the acquisition of Avanti Polar Lipids LLC (Avanti) and on 24 November 2020, the Group completed the acquisition of Fragrance Spanish Topco, S.L. (Iberchem). • As a result of the acquisitions, in accordance with IFRS 3 Business Combinations, the Group has performed fair value assessments of the identified acquired intangible assets. The identification and assessment of fair value of the intangible assets acquired in each business combination is dependent on accurately forecasting the future performance of the Group on a market participant basis. • There was a high degree of subjectivity in assessing a number of the assumptions applied by the Group in the discounted cash flow model used to calculate the acquisition-date fair value of these assets, including discount rate, royalty rates, customer growth and attrition rates, and replacement costs.	**Our procedures included:** • **Our valuation expertise:** we involved our own valuation specialists to assist us in assessing the appropriateness of the intangible assets identified, the valuation methodology applied, and to challenge key assumptions used such as discount rate, royalty rates, customer growth and attrition rates, and replacement costs. • **Benchmarking assumptions:** we evaluated and challenged by comparing to internally and externally derived data. • **Historical comparisons:** we assessed the accuracy of the forecasting processes in place for the acquired businesses through comparison of previous forecasts to actual results and considering whether the forecasts used are the most appropriate basis upon which to fair value the acquired intangible assets. • **Sensitivity analysis:** we assessed the sensitivity of the fair value of the intangible assets acquired to changes in certain assumptions. • **Assessing transparency:** we considered the adequacy of the Group's disclosures in respect of the valuation of acquired intangible assets. We performed the tests above rather than seeking to rely on any of the Group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described. **Our results** • We found the identification of and valuation of acquired intangible assets to be acceptable.

Independent Auditor's Report to the Members of Croda International Plc continued

Group	The risk	Our response
Valuation of defined benefit pension scheme obligation (Gross defined benefit obligation £1,544.4m; 2019: £1,441.7m) *Refer to page 74 (Audit Committee Report), page 124 (accounting policy) and note 11 on pages 134 to 137 (financial disclosures).*	**Subjective valuation:** • The Group has three defined benefit pension schemes that are material in the context of the overall balance sheet and the results of the Group. • Significant estimates, including the discount rate, the inflation rate and the mortality rate, are made in valuing the Group's defined benefit pension obligations (before deducting the schemes' assets). The UK scheme is still open to future accrual and new members, and small changes in the assumptions and estimates with respect to the obligation would have a significant effect on the financial position of the Group. The Group engages external actuarial specialists to assist them in selecting appropriate assumptions and calculate the obligations. • The effect of these matters is that, as part of our risk assessment, we determined that the valuation of the defined benefit obligations has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole, and possibly many times that amount. The financial statements (note 11) disclose the sensitivity estimated by the Group.	**Our procedures included:** • **Benchmarking assumptions:** we challenged key assumptions applied (discount rate, inflation rate, and mortality rate) with the support of our own actuarial specialists, including a comparison of key assumptions against market data. • **Sensitivity analysis:** we assessed the sensitivity of the defined benefit obligation to changes in certain assumptions. • **Actuary's credentials:** we assessed the competence, independence and integrity of the Group's actuarial expert. • **Assessing transparency:** we considered adequacy of the Group's disclosures in respect of the sensitivity of the net deficit to changes in key assumptions. We performed the tests above rather than seeking to rely on any of the Group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described. **Our results** • We found the valuation of the defined benefit pension scheme obligation to be acceptable (2019 result: acceptable).

Group	The risk	Our response
Goodwill impairment (Goodwill: £866.7m (2019: £348.5m), although this specific risk is only associated with the Sipo (£21.3m, 2019: £20.7m) and Biosector (£26.2m, 2019: £24.9m) Cash Generating Units). *Refer to page 74 (Audit Committee Report), page 123 (accounting policy) and note 12 on pages 138 to 140 (financial disclosures).*	**Forecast based assessment:** • The Group has, over recent years, acquired a number of companies which has led to a material increase in the goodwill balance. Some of these acquisitions, and in particular Biosector, are still at an early stage of their integration into the Group and are therefore subject to greater levels of estimation uncertainty in respect of the underlying impairment model assumptions. • In addition, the headroom in respect of the impairment test on Sipo, a historic acquisition and separate Cash Generating Unit, is relatively small, and small changes in the assumptions and estimates applied in the value in use calculations could impact on management's conclusions about the carrying value of goodwill and how this compares to the recoverable amount. • The effect of these matters is that, as part of our risk assessment, we determined that impairment assessments in respect of the Sipo and Biosector Cash Generating Units have a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole. The financial statements (note 12) disclose the sensitivities estimated by the Group.	**Our procedures included:** • **Assessing methodology:** we obtained the discounted value in use cash flow models and assessed the methodology, principles and integrity of each model. • **Our valuation expertise:** we involved our own valuation specialists in respect of the Sipo and Biosector models to assist us in challenging the appropriateness of the methodology, key assumptions and cash flow forecasts. • **Benchmark assumptions:** we challenged the Group's forecast assumptions for cash flow projections, including the rate of short to medium term growth of sales, the long-term growth rates and the appropriateness of discount rates, with reference to internally and externally derived sources. • **Historical comparisons:** we assessed the Group's historical forecasting accuracy by comparing forecasts from prior years with actual results in those years. • **Sensitivity analysis:** we performed breakeven analysis on the key assumptions including the discount rate and growth rate. • **Assessing transparency:** we considered 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 reflect the risks inherent in the valuations. We performed the tests above rather than seeking to rely on any of the Group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described. **Our results** • We found the Directors' conclusion that there is no impairment of goodwill in the Sipo and Biosector Cash Generating Units to be acceptable (2019 result: acceptable).

Independent Auditor's Report to the Members of Croda International Plc continued

Parent Company	The risk	Our response
Recoverability of parent Company's intercompany receivables (£1,452.2m; 2019: £1,589.6m) *Refer to page 74 (Audit Committee Report), page 126 (accounting policy) and note H on page 159 (financial disclosures).*	**Low risk, high value:** • The carrying amount of the parent Company's intercompany receivables, held at cost less impairment, represents 51% (2019: 72%) of the parent Company's total assets. • We do not consider the recoverable amount of these receivables to be at a high risk of significant misstatement, or to be subject to a significant level of judgement. However, due to their materiality in the context of the parent Company financial statements as a whole, this is considered to be the area which had the greatest effect on our overall parent Company audit.	**Our procedures included:** • **Tests of detail:** we assessed 100% of Group debtors to identify, with reference to the relevant debtors' draft balance sheet, whether they have a positive net asset value and therefore coverage of the debt owed, as well as assessing whether those debtor companies have historically been profit-making. • **Assessing subsidiary audits:** we assessed the work performed by the subsidiary audit team, and considering the results of that work, on those net assets, including assessing the ability of the subsidiary to obtain liquid funds and therefore the ability of the subsidiary to fund the repayment of the receivable. We performed the tests above rather than seeking to rely on any of the parent Company's controls because the nature of the balance meant that detailed testing is inherently the most effective means of obtaining audit evidence. **Our results** • We found the Directors' conclusion that there is no impairment of the intercompany receivable balance to be acceptable (2019 result: acceptable).

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

Materiality for the Group financial statements as a whole was set at £15.0m (2019: £15.0m), determined with reference to a benchmark of normalised Group profit before tax (PBT) of £300.2m (2019: £311.5m), of which it represents 5.0% (2019: 4.8%).

We normalised PBT by adding back adjustments that do not represent the normal, continuing operations of the Group and additionally in 2020 by averaging over 3 years. The items we adjusted were exceptional redundancy costs and the related curtailment gain as disclosed in notes 3 and 11.

Materiality for the parent Company financial statements as a whole was set at £8.7m (2019: £8.7m), determined with reference to a benchmark of parent Company total assets of £2,851.4m (2019: £2,198.5m), of which it represents 0.3% (2019: 0.4%).

In line with our audit methodology, our procedures on individual account balances and disclosures were performed to a lower threshold, performance materiality, so as to reduce to an acceptable level the risk that individually immaterial misstatements in individual account balances add up to a material amount across the financial statements as a whole.

Performance materiality for the Group and the Parent company was set at 75% (2019: 75%) of materiality for the financial statements as a whole, which equates to £11.3m (2019: £11.3m) for the Group and £6.5m (2019: £6.5m) for the Parent company. We applied this percentage in our determination of performance materiality because we did not identify any factors indicating an elevated level of risk.

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £0.75m (2019: £0.75m) with the exception of reclassification misstatements greater than or £2.25m (2019: £2.25m) for reclassification misstatements, in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 85 (2019: 81) reporting components, we subjected 12 (2019: 9) to full scope audits for Group purposes and 7 (2019: 7) to specified risk-focused audit procedures. One component (2019: 1) for which we performed specific risk-focused procedures was not individually financially significant enough to require a full scope audit for Group purposes, but did present specific individual risks that needed to be addressed. The other 6 (2019: 6) components for which we performed work other than audits for Group reporting purposes were not individually significant but were included in the scope of our Group reporting work in order to provide further coverage over the Group's results.

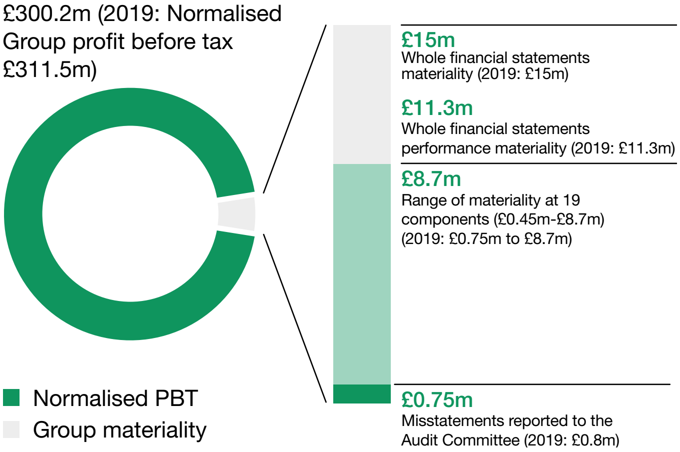
The components within the scope of our work accounted for the percentages illustrated opposite.

Normalised Group profit before tax

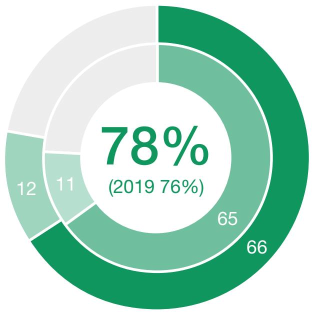
£300.2m (2019: Normalised Group profit before tax £311.5m)

Group materiality

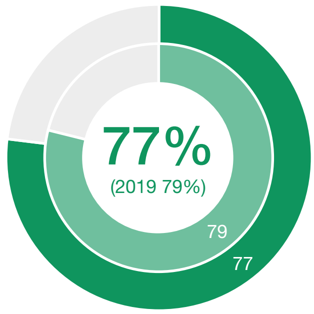
£15m (2019: £15m)



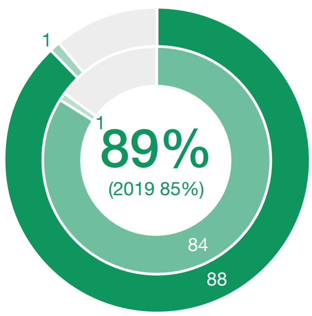
Group revenue



Total of the profits and losses that made up Group profit before tax



Group total assets



- Full scope for Group audit purposes 2020
- Specified risk-focused audit procedures 2020
- Full scope for Group audit purposes 2019
- Specified risk-focused audit procedures 2019
- Residual components

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

The remaining 22% (2019: 24%) of total Group revenue, 23% (2019: 21%) of total of the profits and losses that made up the Group profit before tax and 11% (2019: 15%) of total Group assets is represented by 66 (2019: 65) reporting components, none of which individually represented more than 2% (2019: 2%) of any of total Group revenue, Group profit before tax or total Group assets. For these 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.

The Group 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 the component materialities, which ranged from £0.5m to £8.7m (2019: £0.8m to £8.7m), having regard to the mix of size and risk profile of the Group across the components. The work on 11 of the 19 components (2019: 10 of the 16 components) was performed by component auditors and the rest, including the audit of the parent Company, was performed by the Group team. The Group team performed procedures on the items excluded from normalised Group profit before tax.

On account of travel restrictions in place during the performance of the audit the Group team did not visit the component auditors and instead senior members of the Group audit team held regular video conference meetings with all in scope components. These meetings involved explanation of Group audit instructions, involvement in planning audit procedures, discussing progress updates and emerging findings, reviewing outcomes of testing performed and involvement in discussing audit findings with component management. The Group audit team reviewed the audit documentation of component audits through various stages of their audits. The Group team also attended the component virtual clearance meetings. At these meetings, the findings reported to the Group team were discussed in more detail, and any further work required by the Group team was then performed by the component auditor.

4. Going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Group or the parent Company or to cease their operations, and as they have concluded that the Group's and the parent Company's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

We used our knowledge of the Group, its industry, and the general economic environment to identify the inherent risks to its business model and analysed how those risks might affect the Group's and parent Company's financial resources or ability to continue operations over the going concern period. The risk that we considered most likely to adversely affect the Group's and parent Company's available financial resources and/or metrics relevant to debt covenants over this period was:

- The potential impact on Group revenue of economic uncertainty and reduced customer confidence.

We also considered less predictable but realistic second order impacts, such as product quality failures, regulatory incidents and site incidents, which could result in a rapid reduction of available financial resources.

We considered whether these risks could plausibly affect the liquidity or covenant compliance in the going concern period by comparing severe, but plausible downside scenarios that could arise from these risks individually and collectively against the level of available financial resources and covenants indicated by the Group's financial forecasts.

Our procedures also included:

- Critically assessing assumptions in the Directors' initial downside scenarios relevant to liquidity and covenant metrics, in particular in relation to profitability by comparing to historical trends and our knowledge of the entity and the sector in which it operates.
- Assessing whether downside scenarios applied mutually consistent assumptions in aggregate, taking into account all reasonably possible downsides.
- We also compared past budgets to actual results to assess the Directors' track record of budgeting accurately.

We considered whether the going concern disclosure on page 121 gives a full and accurate description of the Directors' assessment of going concern, including the identified risks and related sensitivities.

Our conclusions based on this work:

- we consider that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate;
- we have not identified, and concur with the Directors' assessment that there is not, a material uncertainty related to events or conditions that, individually or collectively, may cast significant doubt on the Group's or parent Company's ability to continue as a going concern for the going concern period;
- we have nothing material to add or draw attention to in relation to the Directors' statement on page 121 on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and parent Company's use of that basis for the going concern period, and we found the going concern disclosure on page 121 to be acceptable; and
- the same statement is materially consistent with the financial statements and our audit knowledge.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the above conclusions are not a guarantee that the Group or the parent Company will continue in operation.

5. Fraud and breaches of laws and regulations – ability to detect

Identifying and responding to risks of material misstatement due to fraud

To identify risks of material misstatement due to fraud ("fraud risks") we assessed events or conditions that could indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud. Our risk assessment procedures included:

- Enquiring of Directors, the Audit Committee, internal audit and inspection of policy documentation as to the Group's high-level policies and procedures to prevent and detect fraud, including the internal audit function, as well as whether they have knowledge of any actual, suspected or alleged fraud.
- Reading Board and Audit Committee minutes.
- Considering remuneration incentive schemes (Performance related annual Bonus Plan and Performance share plan) and performance targets for management, including the EPS growth target.
- Using our own forensic specialists to assist us in identifying fraud risks based on discussions of the circumstances of the Group.

We communicated identified fraud risks throughout the audit team and remained alert to any indications of fraud throughout the audit. This included communication from the Group audit team to full scope and specified risk-focused component audit teams of relevant fraud risks identified at the Group level and request these component audit teams to report to the Group audit team any instances of fraud that could give rise to a material misstatement at the Group level.

As required by auditing standards, and taking into account possible pressures to meet profit targets, we perform procedures to address the risk of management override of controls and the risk of fraudulent revenue recognition and the risk that Group and component management may be in a position to make inappropriate accounting entries.

We did not identify any additional fraud risks.

We performed procedures including:

- Identifying journal entries to test for all full scope and specified risk-focused components based on risk criteria and comparing the identified entries to supporting documentation. These included those posted by senior finance management or other high-risk users, and those posted to unusual account combinations.
- Procedures over revenue recognition performed for all full scope and specified risk-focused components, including testing the operating effectiveness of manual controls and performing substantive procedures in respect of in year and post year-end credit notes and the use of data and analytics to test the matching of revenue to underlying customer orders and deliveries, with sample testing performed over outlier populations.

Identifying and responding to risks of material misstatement due to non-compliance with laws and regulations

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general commercial and sector 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 and discussed with the Directors and other management the policies and procedures regarding compliance with laws and regulations.

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 audit team to all full scope and specified risk-focused component audit teams of relevant laws and regulations identified at the Group level, and a request for these component auditors to report to the Group team any instances of non-compliance with laws and regulations that could give rise to a material misstatement at the Group level.

The potential effect of these laws and regulations on the financial statements varies considerably. Firstly, the Group is subject to laws and regulations that directly affect the financial statements including financial reporting legislation (including related companies legislation), distributable profits legislation, pensions legislation, and taxation legislation, and we assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

Secondly, the Group is subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements, for instance through the imposition of fines or litigation or the loss of the Group's licence to operate. We identified the following areas as those most likely to have such an effect: GDPR compliance, health and safety and product liability, competition, anti-bribery and corruption, intellectual property, employment law, tax, export and environmental legislation, recognising the nature of the Group's activities. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of the Directors and other management and inspection of regulatory and legal correspondence, if any. Therefore if a breach of operational regulations is not disclosed to us or evident from relevant correspondence, an audit will not detect that breach.

We discussed with the Audit Committee environmental matters related to actual or suspected breaches of laws or regulations, for which disclosure is not necessary, and considered any implications for our audit.

Context of the ability of the audit to detect fraud or breaches of law or regulation

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely the inherently limited procedures required by auditing standards would identify it.

In addition, as with any audit, there remained a higher risk of non-detection of fraud, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. Our audit procedures are designed to detect material misstatement. We are not responsible for preventing non-compliance or fraud and cannot be expected to detect non-compliance with all laws and regulations.

Independent Auditor's Report to the Members of Croda International Plc continued

6. 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

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 emerging and principal risks and longer-term viability

We are required to perform procedures to identify whether there is a material inconsistency between the Directors' disclosures in respect of emerging and principal risks and the viability statement, and the financial statements and our audit knowledge.

Based on those procedures, we have nothing material to add or draw attention to in relation to:

- the Directors' confirmation within the long-term viability statement on page 49 that they have carried out a robust assessment of the emerging and 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 how emerging risks are identified, and explaining how they are being managed and mitigated; and
- the Directors' explanation in the long-term 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.

We are also required to review the long-term viability statement, set out on page 49 under the Listing Rules. Based on the above procedures, we have concluded that the above disclosures are materially consistent with the financial statements and our audit knowledge.

Our work is limited to assessing these matters in the context of only the knowledge acquired during our financial statements audit. As we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of anything to report on these statements is not a guarantee as to the Group's and parent Company's longer-term viability.

Corporate governance disclosures

We are required to perform procedures to identify whether there is a material inconsistency between the Directors' corporate governance disclosures and the financial statements and our audit knowledge.

Based on those procedures, we have concluded that each of the following is materially consistent with the financial statements and our audit knowledge:

- 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;
- the section of the Annual Report describing the work of the Audit Committee, including the significant issues that the Audit Committee considered in relation to the financial statements, and how these issues were addressed; and
- the section of the Annual Report that describes the review of the effectiveness of the Group's risk management and internal control systems.

We are required to review the part of Corporate Governance Statement relating to the Group's compliance with the provisions of the UK Corporate Governance Code specified by the Listing Rules for our review. We have nothing to report in this respect.

7. 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:

- adequate accounting records have not been kept by the parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent Company 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.

8. Respective responsibilities

Directors' responsibilities

As explained more fully in their statement set out on page 105, 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 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 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.

9. 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 and the terms of our engagement by the Company. 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 the further matters we are required to state to them in accordance with the terms agreed with the Company, 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.

Chris Hearld (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
1 Sovereign Square
Sovereign Street
Leeds
LS1 4DA
1 March 2021

Group Consolidated Statements

Group Income Statement

for the year ended 31 December 2020

	Note	2020 Adjusted £m	2020 Adjustments £m	2020 Reported Total £m	2019 Restated[1] Adjusted £m	2019 Adjustments £m	2019 Restated[1] Reported Total £m
Revenue	1	**1,390.3**	**–**	**1,390.3**	1,377.7	–	1,377.7
Cost of sales		**(758.2)**	**–**	**(758.2)**	(746.5)	–	(746.5)
Gross profit		**632.1**	**–**	**632.1**	631.2	–	631.2
Operating costs	2	**(312.5)**	**(29.6)**	**(342.1)**	(291.5)	(19.8)	(311.3)
Operating profit	3	**319.6**	**(29.6)**	**290.0**	339.7	(19.8)	319.9
Financial costs	4	**(19.5)**	**(1.5)**	**(21.0)**	(18.5)	–	(18.5)
Financial income	4	**0.5**	**–**	**0.5**	0.9	–	0.9
Profit before tax		**300.6**	**(31.1)**	**269.5**	322.1	(19.8)	302.3
Tax	5	**(72.4)**	**4.5**	**(67.9)**	(82.4)	3.9	(78.5)
Profit after tax for the year		**228.2**	**(26.6)**	**201.6**	239.7	(15.9)	223.8
Attributable to:							
Non-controlling interests		**–**	**–**	**–**	(0.1)	–	(0.1)
Owners of the parent		**228.2**	**(26.6)**	**201.6**	239.8	(15.9)	223.9
		228.2	**(26.6)**	**201.6**	239.7	(15.9)	223.8

Adjustments relate to exceptional items, acquisition costs, amortisation of intangible assets arising on acquisition and the tax thereon. Details are disclosed in note 3.

1. The classification of cost of sales and administrative expenses in the Income Statement has been revised. 2019 comparative operating costs have been increased by £119.0m, with a corresponding reduction in cost of sales. Details are disclosed on page 122.

Earnings per 10.61p ordinary share		Pence		Pence	Pence		Pence
Basic	7	**175.5**		**155.1**	185.0		172.8
Diluted	7	**175.3**		**154.8**	184.6		172.4

Group Statement of Comprehensive Income

for the year ended 31 December 2020

	Note	2020 £m	2019 £m
Profit after tax for the year		**201.6**	223.8
Other comprehensive income/(expense):			
Items that will not be reclassified subsequently to profit or loss:			
Remeasurements of post-retirement benefit obligations	11	**51.3**	(56.5)
Tax on items that will not be reclassified	5	**(9.7)**	8.4
		41.6	(48.1)
Items that may be reclassified subsequently to profit or loss:			
Currency translation		**(15.0)**	(34.7)
Other comprehensive income/(expense) for the year		**26.6**	(82.8)
Total comprehensive income for the year		**228.2**	141.0
Attributable to:			
Non-controlling interests		**0.1**	(0.5)
Owners of the parent		**228.1**	141.5
		228.2	141.0
Arising from:			
Continuing operations		**228.2**	141.0
		228.2	141.0

Group Balance Sheet

at 31 December 2020

	Note	2020 £m	2019 £m
Assets			
Non-current assets			
Intangible assets	12	**1,311.7**	445.3
Property, plant and equipment	13	**900.8**	805.2
Right of use assets	14	**80.1**	46.2
Investments	16	**5.2**	4.7
Deferred tax assets	6	**14.5**	11.8
Retirement benefit assets	11	**17.6**	10.2
		2,329.9	1,323.4
Current assets			
Inventories	17	**302.6**	268.9
Trade and other receivables	18	**289.9**	216.8
Cash and cash equivalents	20	**106.5**	81.9
		699.0	567.6
Liabilities			
Current liabilities			
Trade and other payables	19	**(240.5)**	(163.9)
Borrowings and other financial liabilities	20	**(49.1)**	(109.5)
Lease liabilities	14	**(10.7)**	(7.8)
Provisions	21	**(6.7)**	(10.9)
Current tax liabilities		**(38.4)**	(44.3)
		(345.4)	(336.4)
Net current assets		**353.6**	231.2
Non-current liabilities			
Borrowings and other financial liabilities	20	**(776.2)**	(476.6)
Lease liabilities	14	**(71.0)**	(35.7)
Other payables	19	**(27.1)**	(0.8)
Retirement benefit liabilities	11	**(49.9)**	(85.2)
Provisions	21	**(3.9)**	(5.3)
Deferred tax liabilities	6	**(160.3)**	(82.4)
		(1,088.4)	(686.0)
Net assets		**1,595.1**	868.6
Equity			
Ordinary share capital	22	**15.1**	14.0
Preference share capital	24	**1.1**	1.1
Share capital		**16.2**	15.1
Share premium account		**707.7**	93.3
Reserves		**861.9**	753.2
Equity attributable to owners of the parent		**1,585.8**	861.6
Non-controlling interests in equity	26	**9.3**	7.0
Total equity		**1,595.1**	868.6

The financial statements on pages 116 to 154 were signed on behalf of the Board who approved the accounts on 1 March 2021.

Anita Frew
Chair

Jez Maiden
Group Finance Director

Group Statement of Cash Flows

for the year ended 31 December 2020

	Note	**2020 £m**	2019 £m
Cash generated from operating activities			
Cash generated by operations	ii	**375.2**	389.2
Interest paid		**(17.5)**	(17.0)
Tax paid		**(70.7)**	(68.3)
Net cash generated from operating activities		**287.0**	303.9
Cash flows from investing activities			
Acquisition of subsidiaries, net of cash acquired	28	**(868.2)**	(3.7)
Acquisition of associates and other investments	16	**(1.5)**	(1.3)
Purchase of property, plant and equipment	13	**(115.0)**	(105.2)
Purchase of other intangible assets	12	**(6.2)**	(5.8)
Proceeds from sale of property, plant and equipment		**0.2**	4.2
Cash paid against non-operating provisions	21	**(1.7)**	(1.1)
Interest received		**0.5**	0.9
Net cash used in investing activities		**(991.9)**	(112.0)
Cash flows from financing activities			
New borrowings		**438.7**	752.5
Repayment of borrowings		**(201.4)**	(637.1)
Payment of lease liabilities	14	**(7.6)**	(8.8)
Issue of ordinary shares		**615.5**	–
Net transactions in own shares		**(6.9)**	(4.3)
Dividends paid to equity shareholders	8	**(115.9)**	(266.9)
Net cash used in financing activities		**722.4**	(164.6)
Net movement in cash and cash equivalents	i,iii	**17.5**	27.3
Cash and cash equivalents brought forward		**63.1**	40.3
Exchange differences	iii	**(2.8)**	(4.5)
Cash and cash equivalents carried forward		**77.8**	63.1
Cash and cash equivalents carried forward comprise:			
Cash at bank and in hand		**106.5**	81.9
Bank overdrafts		**(28.7)**	(18.8)
		77.8	63.1

Group Cash Flow Notes

for the year ended 31 December 2020

(i) Reconciliation to net debt

	Note	2020 £m	2019 £m
Net movement in cash and cash equivalents	iii	**17.5**	27.3
Net movement in borrowings and other financial liabilities	iii	**(229.7)**	(106.6)
Change in net debt from cash flows		**(212.2)**	(79.3)
Non-cash movement in lease liabilities		**(47.8)**	(52.9)
Exchange differences		**7.2**	10.0
		(252.8)	(122.2)
Net debt brought forward		**(547.7)**	(425.5)
Net debt carried forward	iii	**(800.5)**	(547.7)

(ii) Cash generated by operations

	Note	2020 £m	2019 £m
Adjusted operating profit		**319.6**	339.7
Exceptional items	iv	**(4.3)**	(10.7)
Acquisition costs and amortisation of intangible assets arising on acquisition		**(25.3)**	(9.1)
Operating profit		**290.0**	319.9
Adjustments for:			
Depreciation and amortisation		**81.8**	66.4
Impairments		**1.4**	1.4
Profit on disposal of property, plant and equipment		**–**	(3.8)
Net provisions charged (note 21)		**4.2**	10.5
Share-based payments		**4.1**	(5.2)
Non-cash pension expense		**7.7**	1.6
Share of loss of associate		**1.1**	0.8
Cash paid against operating provisions (note 21)		**(7.8)**	(4.0)
Movement in inventories		**(7.0)**	12.2
Movement in receivables		**(15.6)**	8.3
Movement in payables		**15.3**	(18.9)
Cash generated by continuing operations		**375.2**	389.2

(iii) Analysis of net debt

	2020 £m	Cash flow £m	Exchange movements £m	Other non-cash £m	2019 £m
Cash and cash equivalents	**106.5**	27.4	(2.8)	–	81.9
Bank overdrafts	**(28.7)**	(9.9)	–	–	(18.8)
Movement in cash and cash equivalents		17.5	(2.8)	–	
Borrowings repayable within one year	**(20.4)**	70.9	(0.6)	–	(90.7)
Borrowings repayable after more than one year	**(776.2)**	(308.2)	8.6	–	(476.6)
Lease liabilities	**(81.7)**	7.6	2.0	(47.8)	(43.5)
Movement in borrowings and other financial liabilities		(229.7)	10.0	(47.8)	
Total net debt	**(800.5)**	(212.2)	7.2	(47.8)	(547.7)

Included within other non-cash movements are £43.8m of lease liabilities recognised in the year.

(iv) Cash flow on exceptional items

The total cash outflow during the year in respect of exceptional items, including those recognised in prior years' income statements, was £9.4m (2019: £4.5m). Details of exceptional items can be found in note 3 on page 129.

Group Consolidated Statements continued

Group Statement of Changes in Equity

for the year ended 31 December 2020

	Note	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Non-controlling interests £m	Total equity £m
At 1 January 2019		15.1	93.3	68.7	813.4	7.5	998.0
Profit after tax for the year		–	–	–	223.9	(0.1)	223.8
Other comprehensive expense		–	–	(34.3)	(48.1)	(0.4)	(82.8)
Total comprehensive (expense)/income for the year		–	–	(34.3)	175.8	(0.5)	141.0
Transactions with owners:							
Dividends on equity shares	8	–	–	–	(266.9)	–	(266.9)
Share-based payments		–	–	–	0.8	–	0.8
Transactions in own shares		–	–	–	(4.3)	–	(4.3)
Total transactions with owners		–	–	–	(270.4)	–	(270.4)
Total equity at 31 December 2019		15.1	93.3	34.4	718.8	7.0	868.6
At 1 January 2020		15.1	93.3	34.4	718.8	7.0	868.6
Profit after tax for the year		–	–	–	201.6	–	201.6
Other comprehensive (expense)/income		–	–	(15.1)	41.6	0.1	26.6
Total comprehensive (expense)/income for the year		–	–	(15.1)	243.2	0.1	228.2
Transactions with owners:							
Dividends on equity shares	8	–	–	–	(115.9)	–	(115.9)
Share-based payments		–	–	–	3.4	–	3.4
Issue of ordinary shares		1.1	614.4	–	–	–	615.5
Transactions in own shares		–	–	–	(6.9)	–	(6.9)
Total transactions with owners		1.1	614.4	–	(119.4)	–	496.1
Acquisition of a subsidiary with an NCI		–	–	–	–	2.2	2.2
Total equity at 31 December 2020		**16.2**	**707.7**	**19.3**	**842.6**	**9.3**	**1,595.1**

Other reserves include the Capital Redemption Reserve of £0.9m (2019: £0.9m) and the Translation Reserve of £18.4m (2019: £33.5m).

The principal accounting policies adopted in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

Basis of preparation

The consolidated financial statements have been prepared under the historical cost convention, in accordance with applicable law and international accounting standards in conformity with the requirements of the Companies Act 2006 ("Adopted IFRSs") and prepared in accordance with international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union. A summary of the more important Group accounting policies is set out below.

Going concern

The potential impact of COVID-19 on the Group has been considered in the preparation of the financial statements including our evaluation of critical accounting estimates and judgements which are detailed below. The financial statements on pages 116 to 154 have been prepared on a going concern basis which the Directors believe to be appropriate for the following reasons:

In 2019, the Group refinanced its principal bank debt and issued US private placement bonds at attractive pricing. In October 2020, the Group extended the existing 2019 Club facility by a further year, resetting its five-year term and resulting in a maturity date of October 2025. At 31 December 2020 the Group had £1,244m of committed debt facilities available from its banking group, USPP bondholders and lease providers, with principal maturities between 2023 and 2030, of which £378.3m (2019: £459.9m) was undrawn, together with cash balances of £106.5m (2019: £81.9m).

The Directors have reviewed the liquidity and covenant forecasts for the Group, which have been updated for the expected impact of COVID-19 on trading activities. The Directors have also considered sensitivities in respect of potential downside scenarios, and the mitigating actions available, in concluding that the Group is able to continue in operation for a period of at least 12 months from the date of approving the financial statements. These sensitivities include a severe but plausible downside scenario for the continued impact of COVID-19, which is materially consistent with the Group's experience of the crisis to date, alongside an additional scenario considered to be severe but remote. Relative to a base case scenario, the sensitivities assume increasingly pessimistic outlooks for global demand, coupled with slower economic recoveries. In both downside scenarios, we have assumed that our principal manufacturing sites continue to operate. In the severe downside scenario, demand remains below 2019 pre-Covid levels throughout 2021 and 2022. Furthermore, the downside scenarios also assume a material increase in working capital, due to inventory build and higher customer receivables, and substantial margin erosion, predicated on a further deterioration in the economic conditions. In considering the suitability of these scenarios, the Directors have considered, among other factors, the impact of the UK leaving the EU and the recent trading experience outlined in the Finance Review on pages 40 to 43.

In both the downside scenarios, the Group continues to have significant liquidity headroom and good financial covenant headroom under its debt facilities. The Directors have also considered the impact on the Group from the agreement to acquire Alban Muller for total consideration of €25m. This acquisition will be funded from existing debt facilities but will have no material impact on Croda's leverage and a limited impact on its liquidity. The Directors are therefore satisfied that the Group has sufficient resources to continue in operation for a period of not less than 12 months from the date of approval of the financial statements. Accordingly, the consolidated financial statements have been prepared on a going concern basis.

Critical accounting judgements and key sources of estimation uncertainty

The Group's significant accounting policies under Adopted IFRSs have been set by management with the approval of the Audit Committee. The application of these policies requires estimates and assumptions to be made concerning the future and judgements to be made on the applicability of policies to particular situations. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Under Adopted IFRSs an estimate or judgement may be considered critical if it involves matters that are highly uncertain or where different estimation methods could reasonably have been used, or if changes in the estimate that would have a material impact on the Group's results are likely to occur from period to period.

The critical accounting judgement required when preparing the Group's accounts is as follows:

(i) Provisions and contingent liabilities – the Group has recognised potential environmental liabilities and other provisions. The Group's assessment of whether a constructive or legal obligation exists at the reporting date (and can be measured reliably) is a key judgement in determining whether to recognise a liability or disclose a contingent liability. A liability is recognised only where, based on the Group's legal views and advice, it is considered probable that an outflow of resources will be required to settle a present obligation that can be measured reliably. Disclosure of contingent liabilities is made in note 29 unless the possibility of a loss arising is considered remote.

The critical accounting estimates and assumptions required when preparing the Group's accounts are as follows:

(i) Post-retirement benefits – as disclosed in note 11, the Group's principal retirement benefit schemes are of the defined benefit type. Year end recognition of the liabilities under these schemes and the valuation of assets held to fund these liabilities require a number of significant assumptions to be made, relating to key financial market indicators such as inflation and expectations on future salary growth and asset returns. These assumptions are made by the Group in conjunction with the schemes' actuaries and the Directors are of the view that any estimation should be appropriate and in line with consensus opinion.

(ii) Goodwill (note 12) – management are required to undertake an annual test for impairment of indefinite lived assets such as goodwill. Accordingly, the Group tests annually whether goodwill has suffered any impairment and the Group's goodwill value has been supported by detailed value in use calculations relating to the recoverable amounts of the underlying Cash Generating Units ('CGUs'). These calculations require the use of estimates to enable the calculation of the net present value of cash flow projections of the relevant CGU. The critical assumptions are as follows:

- Terminal value growth in EBITDA (calculated as operating profit before depreciation and amortisation) – estimated at 3% unless the profile of a particular CGU warrants a different treatment.
- Selection of appropriate market participant discount rates to reflect the risks specific to the CGU.

Recoverable amounts currently exceed carrying values including goodwill. Goodwill arising on acquisition is allocated to the CGU that is expected to benefit from the synergies of the acquisition. Such goodwill is then incorporated into the Group's standard impairment review process as described above.

(iii) Valuation of acquired intangible assets (note 28) – on acquisition, intangible assets other than goodwill are recognised if they can be identified through being separable from the acquired entity or arising from specific contractual or legal rights. Once recognised, such intangible assets will be initially valued using an appropriate methodology. The acquisition date fair value of intangible assets acquired are based on a number of assumptions including discount rate, royalty rates, growth rates, customer attrition and replacement cost.

Changes in accounting policy

(i) A number of new amendments to standards and interpretations effective for annual periods beginning on or after 1 January 2020 and have been applied in preparing these consolidated financial statements. None of these had a significant effect on the consolidated financial statements of the Group.

(ii) New standards and interpretations not yet adopted – a number of new standards and amendments to standards and interpretations are effective for annual periods beginning on or after 1 January 2021 and have not been applied in preparing these consolidated financial statements. None of these is expected to have a significant effect on the consolidated financial statements of the Group.

(iii) The Group has changed the classification of certain costs between cost of sales and administrative expenses. This change aligns cost of sales recognised in the income statement more closely with the Group's inventory valuation policy and market practice. As a result, 2019 comparative operating costs have been increased by £119.0m, with a corresponding reduction in cost of sales. There has been no impact on the 2019 Group balance sheet or opening Group balance sheet as at 1 January 2019.

Group accounts

General information

Croda International Plc is a public limited company, which is listed on the London Stock Exchange and incorporated and domiciled in the United Kingdom. It is registered in England and Wales and the address of its registered office can be found on page 166.

Subsidiaries

Subsidiaries are all entities over which the Parent Company has control. The Parent controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The Group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred and the equity interests issued by the Group. Acquisition costs are expensed as incurred.

Identifiable assets acquired, and liabilities and contingent liabilities assumed, in a business combination are measured initially at their fair values at the acquisition date, irrespective of the extent of any minority interest. The excess of the cost of acquisition over the Group's share of identifiable net assets acquired is recorded as goodwill.

Intra-Group transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated.

Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Transactions with non-controlling interests

The Group treats transactions with non-controlling interests as transactions with the equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded as equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

Intangible assets

Goodwill

On acquisition of a business, fair values are attributed to the net assets acquired. Goodwill arises where the fair value of the consideration given for a business exceeds such net assets. Goodwill arising on acquisitions is capitalised and carried at cost less accumulated impairment losses. Goodwill is subject to impairment review, both annually and when there are indications that the carrying value may not be recoverable. For the purpose of impairment testing, assets are grouped at the lowest levels for which there are separately identifiable cash flows, known as CGUs. For goodwill balances where the relevant group of CGUs exceeds the size of the Group's operating segments, impairment testing is performed at the operating segment level.

If the recoverable amount of the CGU is less than the carrying value of the goodwill, an impairment loss is recognised immediately against the goodwill value. The recoverable amount of the CGU is the higher of fair value less costs to sell and value in use. Value in use is estimated with reference to estimated future cash flows discounted to net present value using a market participant discount rate that reflects the risks specific to the CGU. Typically, the Group's weighted average cost of capital is used as a starting point and then adjusted to reflect the risk profile of a particular CGU if warranted. The Group uses growth estimates that track below the Group's historical growth rates unless the profile of a particular CGU warrants a different treatment.

Other intangible assets arising on acquisition

On acquisition, intangible assets other than goodwill are recognised if they can be identified through being separable from the acquired entity or arising from specific contractual or legal rights.

Once recognised, such intangible assets will be initially valued using an appropriate methodology. For acquisitions in 2020 the following intangible asset types recognised and valuation methodologies applied were:

- Technology processes (relief-from-royalty and replacement cost)
- Trade names and brands (relief-from-royalty)
- Customer relationships (income approach)

Following initial recognition, the asset will be written down on a straight-line basis over its useful life, which range from 7 to 15 years for technology processes and from 6 to 20 years for trade names, brands and customer relationships. Useful lives are regularly reviewed to ensure their continuing relevance.

Research and development

Research expenditure, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is charged to the income statement in the year in which it is incurred. Internal development expenditure, whereby research findings are applied to a plan for the production of new or substantially improved products or processes, is charged to the income statement in the year in which it is incurred unless it meets the recognition criteria of IAS 38 'Intangible Assets'. Development uncertainties typically mean that such criteria are not met, most commonly because the Group can only demonstrate the existence of a market at a late stage in the product development cycle, at which point the material element of project spend has already been incurred and charged to the income statement. Where, however, the recognition criteria are met, intangible assets are capitalised and amortised over their useful economic lives from product launch.

Intangible assets relating to products in development are subject to impairment testing at each balance sheet date or earlier upon indication of impairment. Any impairment losses are written off to the income statement.

Computer software

Computer software licences covering a period of greater than a year are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised over their estimated useful lives which range from 3 to 7 years.

Revenue recognition

Revenue is measured based on the consideration specified in a contract with a customer and excludes intra-Group sales. The Group recognises revenue on completion of contractual performance obligations, generally when it transfers control over a product or service to a customer.

Sale of goods

The principal activity from which the Group generates revenue is the supply of products to customers from its various manufacturing sites and warehouses, and in some limited instances from consignment inventory held on customer sites. Products are supplied under a variety of standard terms and conditions, and in each case, revenue is recognised when contractual performance obligations between the Group and the customer are satisfied. This will typically be on dispatch or delivery. When sales discount and rebate arrangements result in net variable consideration, appropriate provisions are recognised as a deduction from revenue at the point of sale. The Group typically uses the expected value method for estimating rebates, reflecting that such contracts have similar characteristics and a range of possible outcomes. The Group recognises revenue to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue will not be required.

Royalties and profit sharing arrangements

Revenues are recognised when performance obligations between the Group and the customer are satisfied in accordance with the substance of the underlying contract.

Interest and dividend income

Interest income is recognised on a time-proportion basis using the effective interest method.

Dividend income is recognised when the right to receive payment is established.

Segmental reporting

An operating segment is a group of assets and operations engaged in providing products and services that are subject to risks or returns that are different from those of other segments. Operating segments presented in the financial statements are consistent with the internal reporting provided to the Group's Chief Operating Decision Maker, which has been identified as the Group Executive Committee.

Employee benefits

Pension obligations

The Group accounts for pensions and similar benefits under IAS 19 'Employee Benefits' (revised). In respect of defined benefit plans (pension plans that define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation), obligations are measured at discounted present value whilst plan assets are recorded at fair value. The assets and liabilities recognised in the balance sheet in respect of defined benefit pension plans are the net of plan obligations and assets. A scheme surplus is only recognised as an asset in the balance sheet when the Group has the unconditional right to future economic benefits in the form of a refund or a reduction in future contributions. For those schemes where an accounting surplus is currently recognised, the Group expects to recover the value through reduced future contributions. No allowance is made in the past service liability in respect of either the future expenses of running the schemes or for non service-related death in service benefits which may arise in the future. The operating costs of such plans are charged to operating profit and the finance costs are recognised as financial income or an expense as appropriate.

Service costs are spread systematically over the lives of employees and financing costs are recognised in the periods in which they arise. Remeasurements are recognised in the statement of comprehensive income. Payments to defined contribution schemes (pension plans under which the Group pays fixed contributions into a separate entity) are charged as an expense as they fall due.

Other post-retirement benefits

Some Group companies provide post-retirement healthcare benefits to their retirees. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment using an accounting methodology similar to that for defined benefit pension plans. Remeasurements are recognised in the statement of comprehensive income. These obligations are valued annually by independent qualified actuaries.

Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits when it is demonstrably committed to either (i) terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or (ii) providing termination benefits as a result of an offer made to encourage voluntary redundancy.

Share-based payments

The Group operates a number of cash and equity settled, share-based incentive schemes. These are accounted for in accordance with IFRS 2 'Share-based Payments', which requires an expense to be recognised in the income statement over the vesting period of the options. The expense is based on the fair value of each instrument which is calculated using the Black Scholes or binomial model as appropriate. Any expense is adjusted to reflect expected and actual levels of options vesting for non market-based performance criteria.

Currency translations

Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Sterling, which is the Company's functional and presentation currency.

Transactions and balances

Monetary assets and liabilities are translated at the exchange rates ruling at the end of the financial period. Exchange profits or losses on trading transactions are included in the Group income statement except when deferred in equity as qualifying cash flow hedges and qualifying net investment hedges.

Group companies

The results and financial position of all the Group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;

(ii) income and expenses for each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and

(iii) all resulting exchange differences are recognised as a separate component of equity.

On consolidation, exchange differences arising from the translation of the net investment in foreign entities, and of borrowings and other currency instruments designated as hedges of such investments, are taken to shareholders' equity.

When a foreign operation is sold, such exchange differences are recognised in the income statement as part of the gain or loss on sale.

Taxation

The charge for taxation is based on the profit for the year and takes into account taxation deferred because of temporary differences between the treatment of certain items for taxation and for accounting purposes. Temporary differences arise on differences between the carrying value of assets and liabilities in the financial statements and their tax base and primarily relate to the difference between tax allowances on tangible fixed assets and the corresponding depreciation charge, and upon the net pension fund deficit. Full provision is made for the tax effects of these differences. No provision is made for unremitted earnings of foreign subsidiaries where there is no commitment to remit such earnings.

Similarly, no provision is made for temporary differences relating to investments in subsidiaries since realisation of such differences can be controlled and is not probable in the foreseeable future. Deferred tax assets are recognised, using the balance sheet liability method, to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

All taxation is calculated on the basis of the tax rates and laws enacted or substantively enacted at the balance sheet date.

Exceptional items

Exceptional items are those items that in the Directors' view are required to be separately disclosed by virtue of their size or incidence to enable a full understanding of the Group's financial performance. In the current year exceptional items relate to the delivery of cost saving actions announced in 2019 and the discount unwind in contingent consideration. Exceptional items in the prior year related to cost saving actions, comprising redundancy and other restructuring costs (including an associated curtailment gain on defined benefit pension schemes and related impairments). Details can be found in note 3 on page 129.

Income statement presentation

The acquisition of Rewitec GmbH in 2019, Avanti Polar Lipids, LLC and Fragrance Spanish Topco, S.L. (Iberchem) in 2020 increased acquisition costs and amortisation of acquired intangible assets. To avoid distorting the underlying trend in profitability, the Group adopts the definitions 'Adjusted operating profit', 'Adjusted profit before tax' and 'Adjusted earnings per share'. In each case acquisition costs, amortisation of intangible assets arising on acquisition and exceptional items, including the respective tax effect, are excluded. The Group income statement has been produced in a columnar format to further aid this analysis.

Property, plant and equipment

Property, plant and equipment is stated at historical cost less depreciation, with the exception of assets acquired as part of a business combination. Cost includes the original purchase price of the asset and the costs attributable to bringing the asset to its working condition for its intended use. The Group's policy is to write off the difference between the cost of all property, plant and equipment, except freehold land, and their residual value on a straight-line basis over their estimated useful lives.

Reviews are made annually of the estimated remaining lives and residual values of individual productive assets, taking account of commercial and technological obsolescence as well as normal wear and tear, and adjustments are made where appropriate. Under this policy it becomes impractical to calculate average asset lives exactly. However, the total lives range from approximately 15 to 40 years for land and buildings, and 3 to 25 years for plant and equipment. All individual assets are reviewed for impairment when there are indications that the carrying value may not be recoverable. The Group's 'plant and equipment' asset class predominantly relates to the value of plant and equipment at the Group's manufacturing facilities. Consequently, the Group does not seek to analyse out of this class other items such as motor vehicles and office equipment.

Impairment of non-financial assets

The Group assesses at each year end whether an asset may be impaired. If any evidence exists of impairment, the estimated recoverable amount is compared to the carrying value of the asset and an impairment loss is recognised where appropriate. The recoverable amount is the higher of an asset's value in use and fair value less costs to sell. In addition to this, goodwill is tested for impairment at least annually. Non-financial assets other than goodwill which have suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Leases

When entering into a new contract, the Group assesses whether it is, or contains, a lease. A lease conveys a right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right of use asset and a lease liability at the lease commencement date. The right of use asset is initially measured at cost, and subsequently at cost less any accumulated depreciation and impairment losses, adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date and discounted using the interest rate implicit in the lease or, more typically, the Group's incremental borrowing rate (when the implicit rate cannot be readily determined).

The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payments made. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, a change in the estimate of the amount expected to be payable under a residual value guarantee or changes in the Group's assessment of whether a purchase, extension or termination option is reasonably certain to be exercised.

The Group adopts recognition exemptions for short-term (less than 12 months) and low value leases and elects not to separate lease components from any associated fixed non-lease components.

The Group classifies payments of lease liabilities (principal and interest portions) as part of financing activities. Payments of short-term, low value and variable lease components are classified within operating activities.

Group Accounting Policies continued

Derivative financial instruments

The Group uses derivative financial instruments where deemed appropriate to hedge its exposure to interest rates and short term currency rate fluctuations. The Group's accounting policy is set out below.

Derivative financial instruments are recorded initially at cost. Subsequent measurement depends on the designation of the instrument as either: (i) a hedge of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge); or (ii) a hedge of highly probable forecast transactions (cash flow hedge).

(i) Fair value hedge

Changes in the fair value of derivatives, for example interest rate swaps and foreign exchange contracts, that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

(ii) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognised in equity. The gain or loss relating to the ineffective portion is recognised immediately in the income statement. Amounts accumulated in equity are recycled in the income statement in the periods when the hedged item will affect profit or loss (for instance when the forecast sale that is hedged takes place). However, when the forecast transaction that is hedged results in the recognition of a non-financial asset (for example inventory) or a liability, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset or liability.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the income statement.

When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement.

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in the income statement.

Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings using the effective interest method. Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Trade and other payables

Trade and other payables are recognised initially at fair value. With the exception of contingent consideration, trade and other payables are subsequently measured at amortised cost using the effective interest method. Contingent consideration is measured at fair value based on the present value of the expected future payments, discounted using a risk-adjusted discount rate. Continent consideration is remeasured at fair value at each reporting date and subsequent changes in fair value and associated discount unwind are recognised in the income statement.

Inventories

Inventories are stated at the lower of cost and net realisable amount on a first in first out basis. Cost comprises all expenditure, including related production overheads, incurred in the normal course of business in bringing the inventory to its location and condition at the balance sheet date. Net realisable amount is the estimated selling price in the ordinary course of business less any applicable variable selling costs. Provision is made for obsolete, slow moving and defective inventory where appropriate. Profits arising on intra-group sales are eliminated in so far as the product remains in Group inventory at the year end.

Trade and other receivables

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost, using the effective interest method, less impairment losses. A provision for impairment of trade receivables is recognised based on lifetime expected losses, but principally comprises balances where objective evidence exists that the amount will not be collectible. Such amounts are written down to their estimated recoverable amounts, with the charge being made to operating expenses.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances and short term deposits. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the statement of cash flows. Cash and bank overdrafts are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts, there is an intention to settle on a net basis and interest is charged on a net basis.

Environmental, restructuring and other provisions

The Group is exposed to environmental liabilities relating to its operations and liabilities following the acquisition of Uniqema. Provisions are made immediately where a legal obligation is identified, can be quantified and it is regarded as more likely than not that an outflow of resources will be required to settle the obligation. The Group does consider the impact of discounting when establishing provisions and provisions are discounted when the impact is material and the timing of cash flows can be estimated with reasonable certainty.

Share capital

Investment in own shares

(i) Employee share ownership trusts – shares acquired by the trustees of the employee share ownership trust (the Trustees), funded by the Company and held for the continuing benefit of the Company are shown as a reduction in equity attributable to owners of the parent. Movements in the year arising from additional purchases by the Trustees of shares or the receipt of funds due to the exercise of options by employees are accounted for within reserves and shown as a movement in equity attributable to owners of the parent in the year. Administration expenses of the trusts are charged to the Company's income statement as incurred.

(ii) Treasury shares – where any Group company purchases the Company's equity share capital as treasury shares, the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the Company's equity holders until the shares are cancelled, reissued or disposed of. Where such shares are subsequently sold or reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Company's equity holders.

Dividends

Dividends on ordinary share capital are recognised as a liability when the liability is irrevocable. Accordingly, final dividends are recognised when approved by shareholders and interim dividends are recognised when paid.

Investments

Investments in equity securities are measured at fair value, with movements in the fair value being recognised in the income statement or equity on an instrument by instrument basis. Investments in associates are initially recorded at cost and subsequently adjusted for the Group's share of results. Investments are subject to impairment testing at each balance sheet date or earlier upon indication of impairment.

Notes to the Group Accounts

1. Segmental analysis

The Group's sales, marketing and research activities are organised into four global market sectors, being Personal Care, Life Sciences, Performance Technologies and Industrial Chemicals. These are the segments for which summary management information is presented to the Group's Executive Committee, which is deemed to be the Group's Chief Operating Decision Maker. A review of each sector can be found within the Strategic Report on pages 24 to 29.

There is no material trade between segments. Segmental results include items directly attributable to a specific segment as well as those that can be allocated on a reasonable basis. Segment assets consist primarily of property, plant and equipment, intangible assets, inventories and trade and other receivables.

	2020 £m	2019 £m
Income statement		
Revenue		
Personal Care	**475.9**	485.2
Life Sciences	**401.6**	350.5
Performance Technologies	**416.4**	430.2
Industrial Chemicals	**96.4**	111.8
Total Group revenue	**1,390.3**	1,377.7
Adjusted operating profit		
Personal Care	**136.5**	162.1
Life Sciences	**129.4**	107.1
Performance Technologies	**54.0**	69.4
Industrial Chemicals	**(0.3)**	1.1
Total Group operating profit (before exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition)	**319.6**	339.7
Exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition[1]	**(29.6)**	(19.8)
Total Group operating profit	**290.0**	319.9

1. Relates to Personal Care £13.5m (2019: £3.9m), Life Sciences £12.2m (2019: £9.4m), Performance Technologies £3.6m (2019: £5.6m) and Industrial Chemicals £0.3m (2019: £0.9m)

In the following table, revenue has been disaggregated by sector and destination. This is the primary management information that is presented to the Group's Executive Committee.

	Europe, Middle East & Africa £m	North America £m	Latin America £m	Asia £m	**Total £m**
Revenue 2020					
Personal Care	163.1	148.5	49.0	115.3	**475.9**
Life Sciences	164.7	122.3	54.5	60.1	**401.6**
Performance Technologies	192.0	104.5	26.1	93.8	**416.4**
Industrial Chemicals	42.6	11.7	2.0	40.1	**96.4**
Total Group revenue	562.4	387.0	131.6	309.3	**1,390.3**
Revenue 2019					
Personal Care	168.4	143.1	55.1	118.6	**485.2**
Life Sciences	138.1	98.3	58.6	55.5	**350.5**
Performance Technologies	200.4	112.9	27.6	89.3	**430.2**
Industrial Chemicals	52.0	13.1	2.5	44.2	**111.8**
Total Group revenue	558.9	367.4	143.8	307.6	**1,377.7**

	2020 £m	2019 £m
Balance sheet		
Total assets		
Segment total assets:		
Personal Care	**1,437.5**	560.3
Life Sciences	**833.4**	568.2
Performance Technologies	**504.5**	501.0
Industrial Chemicals	**109.7**	152.9
Total segment assets	**2,885.1**	1,782.4
Tax assets	**14.5**	11.8
Retirement benefit assets	**17.6**	10.2
Cash and investments	**111.7**	86.6
Total Group assets	**3,028.9**	1,891.0

Capital expenditure and depreciation

	2020 £m Additions to non-current assets	2020 £m Depreciation and amortisation	2019 £m Additions to non-current assets	2019 £m Depreciation and amortisation
Personal Care	**46.8**	**23.5**	34.5	18.4
Life Sciences	**64.1**	**29.2**	32.2	21.0
Performance Technologies	**48.1**	**24.3**	45.1	21.3
Industrial Chemicals	**6.1**	**4.8**	10.8	5.7
Total Group	**165.1**	**81.8**	122.6	66.4

The Group manages its business segments on a global basis. The operations are based in the following geographical areas: Europe, with manufacturing sites in the UK, France, the Netherlands, Italy, Spain, Finland and Denmark; North America, with manufacturing sites in the US; Latin America, with manufacturing sites in Brazil and Argentina; Asia, with manufacturing sites in Singapore, Japan, India, China, Indonesia and Australia; and South Africa. With the acquisition of Fragrance Spanish Topco, S.L. ('Iberchem') the Group now has additional manufacturing sites in Colombia, Mexico, Malaysia and Tunisia.

The Group's revenue from external customers in the UK is £46.2m (2019: £58.6m), in Germany is £104.7m (2019: £100.0m), in China is £105.2m (2019: £91.2m), in the US is £355.4m (2019: £332.9m) and the total revenue from external customers from other countries is £778.8m (2019: £795.0m). No single external customer represents more than 3% of the total revenue of the Group. The total of non-current assets other than financial instruments, retirement benefit assets and deferred tax assets located in the UK is £178.9m (2019: £137.0m) and in other countries is £1,252.2m (2019: £815.9m). Goodwill has not been split by geography as this asset is not attributable to a geographical area.

2. Operating costs

	2020 £m	2019 Restated £m
Analysis of net operating expenses by function:		
Distribution costs	**71.7**	65.9
Administrative expenses	**270.4**	245.4
	342.1	311.3

Additional information on the nature of operating expenses, including depreciation and employee costs, is provided in note 3. The 2019 restatement is described in the Group Accounting Policies on page 122.

3. Profit for the year

	2020 £m	2019 £m
The Group profit for the year is stated after charging:		
Depreciation and amortisation (note 12, 13 & 14)	**81.8**	66.4
Impairments (exceptional)	**1.4**	1.4
Staff costs (note 9)	**295.5**	268.9
Redundancy costs (non-exceptional)	**0.2**	0.8
Redundancy costs (exceptional)	**1.8**	10.4
Inventories – cost recognised as expense in cost of sales	**758.2**	746.5
Inventories – provision movement in the year	**3.8**	3.4
Research and development	**38.2**	37.6
Net foreign exchange	**2.1**	3.4
Bad debt charge (note 18)	**0.5**	0.2

Adjustments (including exceptional items):

Adjustments in the Group income statement of £31.1m (2019: £19.8m) include a £5.8m exceptional cost (2019: £10.7m), acquisition costs of £11.7m (2019: £0.3m) and amortisation of intangible assets arising on acquisition of £13.6m (2019: £8.8m). The exceptional cost in the current year reflects a £1.5m discount unwind in contingent consideration and the delivery of the 2019 cost saving actions, comprising £1.8m of redundancy costs, £1.4m of related impairments and £1.1m of other restructuring costs. The exceptional cost in the prior year comprised £10.4m of redundancy costs and £0.3m of other restructuring costs (including an associated curtailment gain on defined benefit pension schemes of £1.2m and related impairments of £1.4m). All items associated with delivering the cost savings have been presented collectively as exceptional by virtue of their size and nature. The tax impact on all adjustments was £4.5m (2019: £3.9m).

	2020 £m	2019 £m
Services provided by the Group's auditors		
Audit services		
Fees payable to the Group auditors for the audit of Parent Company and consolidated financial statements	**0.1**	0.1
Fees payable to the Group auditors and its associates for the audit of the Company's subsidiaries	**1.4**	0.9
Other audit services		
Other non-audit services including fees payable in relation to the Group's interim review	**0.1**	0.1
	1.6	1.1

4. Net financial costs

	2020 £m	2019 £m
Financial costs		
US$100m 5.94% fixed rate 10 year note	**0.4**	4.6
US$100m 3.75% fixed rate 10 year note	**2.7**	–
2014 Club facility due 2021	**–**	0.8
2016 Club facility due 2021	**–**	0.2
2019 Club facility due 2025	**4.5**	3.3
US$200m 3 year term loan due 2023	**0.2**	–
€30m 1.08% fixed rate 7 year note	**0.3**	0.3
€70m 1.43% fixed rate 10 year note	**0.9**	0.9
£30m 2.54% fixed rate 7 year note	**0.8**	0.8
£70m 2.80% fixed rate 10 year note	**2.0**	2.0
€50m 1.18% fixed rate 8 year note	**0.5**	0.3
£65m 2.46% fixed rate 8 year note	**1.6**	0.9
US$60m 3.70% fixed rate 10 year note	**1.7**	0.9
Net interest on retirement benefit liabilities	**1.2**	0.3
Interest on lease liabilities	**1.5**	1.0
Other bank loans and overdrafts	**1.2**	2.2
Unwind of discount on contingent consideration	**1.5**	–
	21.0	18.5
Financial income		
Bank interest receivable and similar income	**(0.5)**	(0.9)
Net financial costs	**20.5**	17.6

5. Tax

	2020 £m	2019 £m
(a) Analysis of tax charge for the year		
UK current corporate tax	**13.2**	15.1
Overseas current corporate taxes	**52.1**	50.5
Current tax	**65.3**	65.6
Deferred tax (note 6)	**2.6**	12.9
	67.9	78.5
(b) Tax on items charged/(credited) to other comprehensive income or equity		
Deferred tax on remeasurement of post-retirement benefits (OCI)	**9.7**	(8.4)
Deferred tax on share-based payments (equity)	**(0.9)**	(0.7)
Deferred tax on provisions (OCI)	**0.3**	–
	9.1	(9.1)
(c) Factors affecting the tax charge for the year		
Profit before tax	**269.5**	302.3
Tax at the standard rate of corporation tax in the UK, 19.0% (2019: 19.0%)	**51.2**	57.4
Effect of:		
Tax rate changes	**(1.5)**	–
Prior year over provisions	**(3.2)**	(2.1)
Tax cost of remitting overseas income to the UK	**1.5**	0.8
Expenses and write-offs not deductible for tax purposes	**1.8**	1.4
Utilisation of unrecognised tax losses	**(1.4)**	–
Net effect of higher overseas tax rates	**19.5**	21.0
	67.9	78.5

The effective adjusted corporate tax rate before exceptional items of 24.1% (2019: 25.6%) is significantly higher than the UK's standard tax rate of 19.0%. The reported corporate tax rate after exceptional items is 25.2% (2019: 26.0%).

Croda operates in many tax jurisdictions other than the UK, both as a manufacturer and distributor, with the majority of those jurisdictions having rates higher than the UK; considerably so in some cases. It is the exposure to these different tax rates that increases the effective tax rate above the UK standard rate and also makes it difficult to forecast the Group's future tax rate with any certainty given the unpredictable nature of exchange rates, individual economies and tax legislators. Other than the exposure to higher overseas tax rates, there are no significant adjustments between the Group's expected and reported tax charge based on its accounting profit. Given the global nature of the Group, and the number of associated cross-border transactions between connected parties, we are exposed to potential adjustments to the price charged for those transactions by tax authorities. However, the Group carries appropriate provisions relating to the level of risk.

The main rate of UK corporation tax reduced from 20% to 19% from 1 April 2017. A further reduction to the UK tax rate was announced to reduce the rate to 17% by 1 April 2020 and was substantively enacted on 6 September 2016. In the March 2020 Budget, it was announced that the main rate of UK corporation tax would be remaining at 19%, and this was substantively enacted on 17 March 2020. These rate changes impacted the rate at which the deferred tax balances in the UK were carried. Overseas tax is calculated at the rates prevailing in the respective jurisdictions.

6. Deferred tax

	2020 £m	2019 £m
The deferred tax balances included in these accounts are attributable to the following:		
Deferred tax assets		
Retirement benefit liabilities	**11.1**	17.2
Provisions	**25.5**	21.6
Gross deferred tax asset	**36.6**	38.8
Offset with deferred tax liabilities	**(22.1)**	(27.0)
Net deferred tax asset	**14.5**	11.8
Deferred tax liabilities		
Accelerated capital allowances	**93.1**	86.6
Revaluation gains	**1.9**	1.9
Acquired intangibles	**82.3**	17.6
Retirement benefit assets	**4.1**	2.3
Other	**1.0**	1.0
Gross deferred tax liability	**182.4**	109.4
Offset with deferred tax assets	**(22.1)**	(27.0)
Net deferred tax liability	**160.3**	82.4
The movement on deferred tax balances during the year is summarised as follows:		
Deferred tax (charged)/credited through the income statement		
Continuing operations before adjustments	**(3.6)**	(16.1)
Adjustments and exceptional items	**1.0**	3.2
Deferred tax (charged)/credited directly to other comprehensive income or equity (note 5(b))	**(9.1)**	9.1
Acquisitions	**(64.8)**	(1.1)
Exchange differences	**1.3**	2.8
	(75.2)	(2.1)
Net balance brought forward	**(70.6)**	(68.5)
Net balance carried forward	**(145.8)**	(70.6)
Deferred tax credited/(charged) through the income statement relates to the following:		
Retirement benefit obligations	**1.5**	0.8
Accelerated capital allowances	**(10.3)**	9.1
Tax losses	**–**	(23.2)
Provisions	**4.1**	(1.4)
Other	**2.1**	1.8
	(2.6)	(12.9)

Deferred tax is calculated in full on temporary differences under the balance sheet liability method at rates appropriate to each subsidiary. Deferred tax expected to reverse in the year to 31 December 2021 and beyond has been measured using the rate due to prevail in the year of reversal.

Deferred tax assets have been recognised in all material cases where such assets arise, as it is probable the assets will be recovered.

Deferred tax is only recognised on the unremitted earnings of overseas subsidiaries to the extent that remittance is expected in the foreseeable future. If all earnings were remitted, an additional £6.6m (2019: £6.4m) of tax would be payable.

All movements on deferred tax balances have been recognised in the income statement with the exception of the items shown in note 5(b).

Of the gross deferred tax assets, £2.6m are expected to reverse within 12 months of the balance sheet date. No material reversal of any of the deferred tax liability is expected within 12 months of the balance sheet date based on the Group’s current capital expenditure programme.

Notes to the Group Accounts continued

7. Earnings per share

	2020 £m	2019 £m
Adjusted profit after tax for the year attributable to owners of the parent	**228.2**	239.8
Exceptional items, acquisition costs and amortisation of intangible assets	**(31.1)**	(19.8)
Tax impact of exceptional items, acquisition costs and amortisation of intangible assets	**4.5**	3.9
Profit after tax for the year attributable to owners of the parent	**201.6**	223.9

	Number m	Number m
Weighted average number of 10.61p (2019: 10.61p) ordinary shares in issue for basic calculation	**130.0**	129.6
Deemed issue of potentially dilutive shares	**0.2**	0.3
Average number of 10.61p (2019: 10.61p) ordinary shares for diluted calculation	**130.2**	129.9

	Pence	Pence
Basic earnings per share	**155.1**	172.8
Adjusted basic earnings per share	**175.5**	185.0
Diluted earnings per share	**154.8**	172.4
Adjusted diluted earnings per share	**175.3**	184.6

Basic earnings per share is calculated by dividing the profit after tax attributable to owners of the parent by the weighted average number of ordinary shares in issue during the year, excluding those shares held in treasury or employee share trusts (note 25). Shares held in employee share trusts are treated as cancelled because, except for a nominal amount, dividends have been waived.

For diluted earnings per share, the weighted average number of ordinary shares in issue is adjusted to assume conversion of all potentially dilutive ordinary shares.

Additional earnings per share calculations are included above to give a better indication of the Group's underlying performance.

8. Dividends

	Pence per share	2020 £m	Pence per share	2019 £m
Ordinary				
Interim				
2019 interim, paid October 2019	**–**	**–**	39.50	50.7
2020 interim, paid October 2020	**39.50**	**50.8**	–	–
Final				
2018 final, paid May 2019	**–**	**–**	49.00	64.6
2018 special, paid May 2019	**–**	**–**	115.00	151.5
2019 final, paid May 2020	**50.50**	**65.0**	–	–
	90.00	**115.8**	203.50	266.8
Preference (paid June and December)		**0.1**		0.1
		115.9		266.9

The Directors are recommending a final dividend of 51.5p per share, amounting to a total of £71.8m, in respect of the financial year ended 31 December 2020.

Subject to shareholder approval, the dividend will be paid on 4 June 2021 to shareholders registered on 7 May 2021 and has not been accrued in these financial statements. The total dividend for the year ended 31 December 2020 will be 91.0p per share amounting to a total of £122.6m.

9. Employees

Group employment costs including Directors	**2020 £m**	2019 £m
Wages and salaries	**215.7**	202.1
Share-based payment charges (note 23)	**13.6**	5.1
Social security costs	**36.6**	36.2
Post-retirement benefit costs	**29.6**	25.5
Redundancy costs	**2.0**	11.2
	297.5	280.1

Average employee numbers by function	**2020 Number**	2019 Number
Production	**3,044**	2,851
Selling and distribution	**1,189**	1,134
Administration	**689**	647
	4,922	4,632

As required by the Companies Act 2006, the figures disclosed above are the weighted averages based on the number of employees including Executive Directors. At 31 December 2020, the Group had 5,684 (2019: 4,580) employees in total.

10. Directors' and key management compensation

Detailed information concerning Directors' remuneration, interests and options is shown in section D of the Directors' Remuneration Report, which is subject to audit, on pages 91 to 99 forming part of the Annual Report and Accounts.

Aggregate compensation for key management, being the Directors and members of the Group Executive Committee, was as follows:

Key management compensation including Directors	**2020 £m**	2019 £m
Short term employee benefits	**4.8**	4.6
Post-retirement benefit costs	**0.1**	0.1
Share-based payment charge/(credit)	**1.2**	(0.3)
	6.1	4.4

Notes to the Group Accounts continued

11. Post-retirement benefits

The table below summarises the Group's net year end post-retirement benefits balance sheet positions and activity for the year.

	2020 £m	2019 £m
Balance sheet:		
Retirement benefit assets	**17.6**	10.2
Retirement benefit liabilities	**(49.9)**	(85.2)
Net liability in Group balance sheet	**(32.3)**	(75.0)
Net balance sheet liabilities for:		
Defined pension benefits	**(17.2)**	(60.9)
Post-employment medical benefits	**(15.1)**	(14.1)
	(32.3)	(75.0)
Income statement charge included in profit before tax for:		
Defined pension benefits	**23.9**	18.2
Post-employment medical benefits	**0.8**	0.5
	24.7	18.7
Remeasurements included in other comprehensive income for:		
Defined pension benefits	**(52.5)**	54.7
Post-employment medical benefits	**1.2**	1.8
	(51.3)	56.5

Defined benefit pension schemes

The Group operates defined benefit pension schemes in the UK, US, Netherlands and several other territories under broadly similar regulatory frameworks. All of the Group's final salary type pension schemes (which provide benefits to members in the form of a guaranteed level of pension payable for life based on salary in the final years leading up to retirement) are closed to future service accrual with the exception of a small number of 'grandfathered' employees in the US scheme.

The UK scheme operated on a final salary basis until 5 April 2016, following which the scheme changed to a Career Average Revalued Earnings (CARE) defined benefit scheme, with annual pensionable earnings capped and pensions in payment indexed based on CPI (previously RPI) for service accrued from 6 April 2016. This change is expected to reduce the future comparable cost and risk attached to the UK scheme. Material defined benefit pension schemes in other territories, including the Netherlands, operate on a similar basis to the UK, except in the US, which (other than for 'grandfathered' employees) operates a cash balance pension scheme that provides a guaranteed rate of return on pension contributions until retirement. From 1 October 2017 the US scheme was closed to new joiners, who will receive defined contribution benefits. The US plans also do not generally receive inflationary increases once in payment. With the exception of this difference in inflationary risk, the Group's main defined benefit pension schemes continue to face materially similar risks, as described on page 137.

The majority of benefit payments are from trustee administered funds; however, there are also a number of unfunded plans where the relevant Group company meets the benefit payment obligation as it falls due.

Plan assets held in trusts are governed by local regulations and practice in each country, as is the nature of the relationship between the Group and the trustees (or equivalent) and their composition. Responsibility for governance of the schemes, including investment decisions and contribution schedules, predominantly lies with the particular scheme's board of trustees with appropriate input from the relevant Group company. The board of trustees must be composed of representatives in accordance with each scheme's regulations and any relevant legislation.

During the period the model used to calculate the discount rate for the UK and Netherlands schemes has been changed reflecting a bond classification adjustment from BICS to BCLASS. The impact of this change as at 31 December 2020 was an increase in the discount rate (UK: 9 basis points, Netherlands: 34 basis points), leading to a £42m combined reduction in the present value of scheme obligations. The UK Government consultation on the future of RPI reported during the period confirming the UK Statistics Authority's intention (and legal and practical ability) to align CPI and RPI by February 2030, the net impact of which was immaterial on the present value of scheme obligations.

The amounts recognised in the balance sheet in respect of these schemes are as follows:

	2020 £m	2019 £m
Present value of funded obligations		
UK pension scheme	**(1,178.5)**	(1,104.2)
US pension scheme	**(133.9)**	(132.3)
Netherlands pension scheme	**(212.3)**	(188.2)
Rest of world	**(19.7)**	(17.0)
	(1,544.4)	(1,441.7)
Fair value of schemes' assets		
UK pension scheme	**1,163.7**	1,063.5
US pension scheme	**150.4**	141.5
Netherlands pension scheme	**205.7**	171.1
Rest of world	**17.0**	14.7
	1,536.8	1,390.8
Net liability in respect of funded schemes	**(7.6)**	(50.9)
Present value of unfunded obligations	**(9.6)**	(10.0)
Net liability in Group balance sheet (excluding post-employment medical benefits)	**(17.2)**	(60.9)

	2020 £m	2019 £m
Movement in present value of retirement benefit obligations in the year:		
Opening balance	**1,451.7**	1,278.7
Current service cost	**23.1**	19.6
Past service cost – plan amendments	**–**	(0.3)
Past service cost – curtailments	**–**	(0.9)
Interest cost	**27.3**	33.9
Remeasurements		
Change in demographic assumptions	**(56.4)**	(8.0)
Change in financial assumptions	**149.3**	174.0
Experience (losses)/gains	**(1.9)**	11.1
Contributions paid in		
Employee	**2.9**	2.8
Benefits paid	**(46.2)**	(43.6)
Exchange differences on overseas schemes	**4.2**	(15.6)
	1,554.0	1,451.7
Movement in fair value of schemes' assets in the year:		
Opening balance	**1,390.8**	1,272.7
Interest income	**26.5**	34.1
Remeasurements		
Return on scheme assets, excluding amounts included in financial expenses	**143.5**	122.4
Contributions paid in		
Employee	**2.9**	2.8
Employer	**15.4**	16.3
Benefits paid out including settlements	**(46.2)**	(43.6)
Exchange differences on overseas schemes	**3.9**	(13.9)
	1,536.8	1,390.8

As at the balance sheet date, the present value of retirement benefit obligations comprised approximately £486m in respect of active employees, £399m in respect of deferred members and £669m in relation to members in retirement.

Total employer contributions to the schemes in 2021 are expected to be £13.9m.

The actuarial assumptions were as follows:

	2020 UK	2020 US	2020 Netherlands	2019 UK	2019 US	2019 Netherlands
Discount rate	**1.3%**	**2.4%**	**0.8%**	1.9%	3.2%	1.2%
Inflation rate – RPI	**2.8%**	**2.5%**	**1.8%**	3.0%	2.5%	1.8%
Inflation rate – CPI	**2.4%**	**n/a**	**n/a**	2.2%	n/a	n/a
Rate of increase in salaries	**4.4%**	**3.5%**	**2.4%**	4.2%	3.5%	2.4%
Rate of increase for pensions in payment	**2.7%**	**n/a**	**1.3%**	2.8%	n/a	1.3%
Duration of liabilities (ie life expectancy) (years)	**19.6**	**11.2**	**22.3**	20.5	11.1	22.4
Remaining working life	**9.6**	**10.6**	**12.4**	14.7	10.1	12.9

Notes to the Group Accounts continued

11. Post-retirement benefits continued

Mortality assumptions are based on country-specific mortality tables and where appropriate allow for future improvements in life expectancy. Where credible data exists, actual plan experience is taken into account. Applying the mortality tables adopted, the expected future average lifetime of members currently at age 65 and members at age 65 in 20 years' time is as follows:

	Current age 65			Age 65 in 20 years		
	UK	US	Netherlands	UK	US	Netherlands
Male	20.1	20.8	21.0	21.4	21.9	22.5
Female	23.2	22.7	25.0	24.7	23.8	26.3

The sensitivity of the defined benefit obligation to changes in the significant assumptions is as follows:

		Impact on retirement benefit obligation	
	Sensitivity	Of increase	Of decrease
Discount rate	0.5%	-9.0%	10.4%
Inflation rate	0.5%	6.7%	-6.4%
Mortality (assumes a one year change in life expectancy)	1 year	4.8%	-4.7%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting year) has been applied as when calculating the retirement benefit obligation recognised in the Group balance sheet. The weighted average duration of the defined benefit obligation is 19.2 years (2019: 19.8 years).

The assets in the schemes comprised:

	2020 £m	**2020 %**	2019 £m	2019 %
Quoted				
Equities	**277.9**	**18%**	240.7	17%
Government bonds	**674.0**	**44%**	584.2	42%
Corporate bonds	**124.2**	**8%**	77.9	6%
Other quoted securities	**31.3**	**2%**	11.3	1%
Unquoted				
Cash and cash equivalents	**77.5**	**5%**	127.3	9%
Real estate	**56.7**	**4%**	57.5	4%
Derivatives	**6.4**	**0%**	1.2	0%
Other	**288.8**	**19%**	290.7	21%
	1,536.8	**100%**	1,390.8	100%

Derivatives presented above represent the scheme's net position on Government bond repurchase agreements and other swap contracts (valued on a mark-to-market basis) which form part of the scheme's liability driven investment (LDI) portfolio. The non-derivative assets in the LDI portfolio have been presented in the relevant asset category.

Post-employment medical benefits

The Group operates an unfunded post-employment medical benefit scheme in the US. The method of accounting, significant assumptions and the frequency of valuations are similar to those used for defined benefit pension schemes set out above with the addition of actuarial assumptions relating to the long term increase in health care costs of 5.0% a year (2019: 5.0%).

The amounts recognised in the balance sheet in respect of this scheme are as follows:

	2020 £m	2019 £m
Present value of unfunded obligations		
US scheme	**15.1**	14.1

	2020 £m	2019 £m
Movement in present value of retirement benefit obligations in the year:		
Opening balance	**14.1**	12.5
Current service cost	**0.4**	0.3
Past service cost – curtailments	**–**	(0.3)
Interest cost	**0.4**	0.5
Remeasurements – change in demographic assumptions	**(0.2)**	(0.1)
Remeasurements – change in financial assumptions	**1.7**	1.9
Remeasurements – experience gains	**(0.3)**	–
Benefits paid	**(0.4)**	(0.3)
Exchange differences on overseas schemes	**(0.6)**	(0.4)
	15.1	14.1

Pension and medical benefits – risks and volatility

Through its defined benefit pension schemes and post-employment medical schemes, the Group is exposed to a number of risks, the most significant of which are detailed below:

Asset volatility

The schemes' liabilities are calculated using a discount rate set with reference to corporate bond yields; if scheme assets underperform this yield, a deficit will be created. The schemes hold a significant proportion of equities, which are expected to outperform corporate bonds in the long term while providing volatility and risk in the short term. As the schemes mature, the Group intends to reduce the level of investment risk by investing more in assets that better match the liabilities. However, the Group and the pension trustees (Trustees) believe that due to the long term nature of the scheme liabilities and the strength of the supporting Group, a level of continuing equity investment is an appropriate element of the Group's long term strategy to manage the schemes efficiently. See below for more details on the Group's asset-liability matching strategy.

Changes in bond yields

A decrease in corporate bond yields will increase scheme liabilities, although this will be partially offset by an increase in the value of the schemes' bond holdings.

Inflation risk

Some of the Group's pension obligations are linked to inflation, and higher inflation will lead to higher liabilities. However, the level of inflationary increases are usually capped to protect the scheme against extreme inflation. The majority of the schemes' assets are either unaffected by inflation in the case of fixed interest bonds or loosely correlated in the case of equities, meaning that an increase in inflation will thus increase the deficit. In the US schemes, the pensions in payment are not linked to inflation, so this is a less material risk.

Life expectancy

The majority of the schemes' obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the schemes' liabilities. This is particularly significant in the UK scheme, where inflationary increases result in higher sensitivity to changes in life expectancy. In the case of the funded schemes, the Group ensures that the investment positions are managed within an asset-liability matching (ALM) framework that has been developed to achieve long-term investments that are cognisant of the obligations under the pension schemes. Within this framework, the Group's ALM objective is to match a portion of assets to the pension obligations by investing in long-term fixed interest securities with maturities that match the benefit payments as they fall due and in the appropriate currency. The Group and Trustees actively monitor how the duration and the expected yield of the investments are matching the expected cash outflows arising from the pension obligations. The Group has not changed the processes used to manage its risks from previous years.

Investments are well diversified, such that the failure of any single investment would not have a material impact on the overall level of assets. A significant portion of assets in 2020 consist of equities and bonds, although the schemes also invest in property, cash and infrastructure funds. The Group believes that equities offer the best returns over the long term with an acceptable level of risk. Both the UK and Dutch schemes make use of a portfolio of derivative instruments to mitigate interest rate and inflation risk.

The latest triennial valuation of the UK scheme was completed as at 30 September 2017. As a result, no deficit funding payments to this scheme were required prior to completion of the next triennial valuation (as at 30 September 2020) which is currently ongoing. The funding review of our US scheme is undertaken annually. As at 1 December 2019 the scheme was 137% funded. The Group's Dutch scheme is subject to a more rigorous regulatory environment under the supervision of the Dutch National Bank (DNB). As at 31 December 2020 the scheme was 107% funded on an actuarial basis relative to the DNB's required level of 119% and a minimum funding requirement of 104%.

The expected distribution of the timing of benefit payments is as follows:

	Less than a year £m	Between 1–2 years £m	Between 2–5 years £m	Beyond 5 years £m	Total £m
Pension benefits	42.2	41.4	133.1	1,337.3	1,554.0
Post-employment medical benefits	0.6	0.6	1.7	12.2	15.1
	42.8	42.0	134.8	1,349.5	1,569.1

Defined contribution schemes

	2020 £m	2019 £m
Contributions paid charged to operating profit	**6.1**	5.6

Financial statements

12. Intangible assets

	Goodwill £m	Software £m	Technology processes £m	Customer relationships £m	Other intangibles £m	Total £m
Cost						
At 1 January 2019	354.0	25.7	59.5	36.9	10.3	486.4
Exchange differences	(7.5)	(1.1)	(3.2)	(1.9)	(0.4)	(14.1)
Additions	–	4.7	–	1.1	–	5.8
Acquisitions	2.1	–	5.4	–	–	7.5
Disposals and write-offs	–	(0.1)	–	–	–	(0.1)
Reclassifications	(0.1)	0.3	–	–	(0.2)	–
At 31 December 2019	**348.5**	**29.5**	**61.7**	**36.1**	**9.7**	**485.5**
At 1 January 2020	348.5	29.5	61.7	36.1	9.7	485.5
Exchange differences	3.1	(0.1)	1.8	(1.0)	(0.5)	3.3
Additions	–	5.3	–	–	1.0	6.3
Acquisitions	515.1	0.8	90.8	183.5	83.1	873.3
Reclassifications	–	0.2	–	–	–	0.2
At 31 December 2020	**866.7**	**35.7**	**154.3**	**218.6**	**93.3**	**1,368.6**
Accumulated amortisation and impairment losses						
At 1 January 2019	–	16.7	8.4	4.3	2.1	31.5
Exchange differences	–	(1.0)	(0.8)	(0.2)	–	(2.0)
Charge for the year (note 3)	–	1.9	6.0	2.3	0.6	10.8
Disposals and write-offs	–	(0.1)	–	–	–	(0.1)
At 31 December 2019	**–**	**17.5**	**13.6**	**6.4**	**2.7**	**40.2**
At 1 January 2020	–	17.5	13.6	6.4	2.7	40.2
Exchange differences	–	0.1	0.7	0.1	0.1	1.0
Charge for the year (note 3)	–	2.0	7.8	4.4	1.5	15.7
Reclassifications	–	–	0.1	–	(0.1)	–
At 31 December 2020	**–**	**19.6**	**22.2**	**10.9**	**4.2**	**56.9**
Net carrying amount						
At 31 December 2020	**866.7**	**16.1**	**132.1**	**207.7**	**89.1**	**1,311.7**
At 31 December 2019	348.5	12.0	48.1	29.7	7.0	445.3
At 1 January 2019	354.0	9.0	51.1	32.6	8.2	454.9

Other intangibles include trade names and brands. Intangible asset amortisation is recorded in operating costs within the income statement on page 116.

Impairment testing for CGUs containing goodwill

The Group's goodwill balance predominantly relates to the value of commercial and other synergies arising from the combination of acquired businesses with Croda's established global sales, marketing and R&D networks. This goodwill is allocated to the Group's Cash Generating Units (CGUs) expected to benefit from that combination based on the smallest identifiable group of assets that generate independent cash inflows.

As discussed in the accounting policies note on page 123, goodwill is tested at each year end for impairment with reference to the relevant CGU's recoverable amount compared to the unit's carrying value including goodwill. Assets are grouped at the lowest level for which there are separately identifiable cash flows relevant to the acquisition generating the goodwill. The recoverable amount is based on value in use calculations using discounted cash flow projections with the following key assumptions:

- Terminal value growth rates – set for each CGU with reference to the long-term growth rate for the market and territory in which the CGU operates
- Discount rate – set using a weighted average cost of capital adjusted for the specific risk profile of each CGU.

The carrying amount of goodwill is allocated to CGUs as follows:

	2020			2019		
	Standalone CGUs £m	**Allocated Goodwill £m**	**Total £m**	Standalone CGUs £m	Allocated Goodwill £m	Total £m
Personal Care	**390.4**	**214.7**	**605.1**	–	151.4	151.4
Life Sciences	**156.6**	**69.8**	**226.4**	93.5	69.5	163.0
Performance Technologies	**24.3**	**4.5**	**28.8**	23.4	4.5	27.9
Industrial Chemicals	**6.4**	**–**	**6.4**	6.2	–	6.2
	577.7	**289.0**	**866.7**	123.1	225.4	348.5

Following the acquisition of Iberchem, £63m of the total acquired goodwill has been identified and allocated to Personal Care as it relates to revenue synergies with Croda's existing Personal Care business. The other allocated goodwill primarily relates to £192m (2019: £192m) associated with the 2006 acquisition of Uniqema (with all other balances individually less than £10m). Due to the geographical and operational scale of the Uniqema acquisition, this goodwill balance is tested for impairment at an operating segment level. Standalone CGUs operate independently of the Group's core regional operating assets, are capable of generating largely independent cash inflows and are therefore annually tested separately for impairment.

For impairment testing performed at an operating segment level, cash flow projections are based on the Group's current year results and a growth rate of 3% (an appropriate view based on past experience), discounted using a weighted average cost of capital, which for these purposes has been calculated to be approximately 8.3% pre-tax (2019: 8.3%). No reasonably possible changes in key assumptions would cause the recoverable amount of the operating segments to be less than their carrying value. Based on the testing performed, no impairment has been recognised for the year ended 31 December 2020.

Standalone CGUs

The carrying amount of goodwill is allocated to Standalone CGUs as follows:

	2020 £m	2019 £m
Incotec	**72.1**	68.6
Biosector	**26.2**	24.9
Sipo	**21.3**	20.7
Ionphase	**7.0**	6.6
Rewitec	**2.4**	2.3
Avanti	**58.3**	–
Iberchem – Fragrances	**258.5**	–
Iberchem – Flavours	**131.9**	–
	577.7	123.1

For impairment testing performed at a Standalone CGU level, Incotec cash flow projections have been based on specific estimates for five years, with other CGUs using 10 year projections to better reflect the industry and territory in which they operate and the period through to when they are expected to reach a steady state of operation. Unless otherwise stated, these cash flow projections assume an appropriate view of past experience, specifically that the market share will not change significantly and that gross and operating margins will remain broadly constant. The terminal value growth rates and discount rates applied in these CGU level calculations are set out below:

	Terminal value growth rate		Pre-tax discount rate	
	2020	2019	**2020**	2019
Incotec	**3.0%**	3.0%	**8.5%**	8.4%
Biosector	**3.0%**	3.0%	**11.0%**	10.2%
Sipo	**3.0%**	4.0%	**12.7%**	10.8%
Ionphase	**3.0%**	3.0%	**9.9%**	10.0%
Rewitec	**3.0%**	n/a	**10.0%**	n/a

Based on the annual impairment testing performed, no impairment has been recognised for the year ended 31 December 2020, and all Standalone CGUs remain on track to perform to our long term expectations. In forming this conclusion the Directors have reviewed sensitivity analysis which considered all reasonably possible downsides on key assumptions, both individually and in combination, and considered whether these would give rise to an impairment. This analysis concluded that no reasonably possible changes in key assumptions would cause the recoverable amount of the Standalone CGUs to be less than the carrying value, other than for Biosector and Sipo.

For the Biosector CGU, the assumptions underpinning the cash flow projections used in the value in use calculation reflect an appropriate view of past experience, specifically that gross margins will be broadly consistent and operating margins will improve as a result of forecast sales growth (10.5% 5 year cumulative average growth rate 'CAGR'). The estimated recoverable amount of the CGU exceeded its carrying value by approximately £21m and therefore the Directors concluded that no impairment was required; however the calculations are sensitive to changes in key assumptions. The key assumptions considered by the Directors, where a reasonably possible change could give rise to an impairment, were the terminal value growth rate and discount rate. If the pre-tax discount rate assumption was increased by 2% the CGU's recoverable amount would be reduced to a level comparable with its carrying value. If this higher discount rate assumption was combined with a 1% decrease in the terminal value growth rate, which, although not management's current expectation is considered to be reasonably possible, this would lead to an impairment charge of £6m.

12. Intangible assets continued

For the Sipo CGU, the assumptions underpinning the cash flow projections used in the value in use calculation reflect an appropriate view of past experience, specifically that gross and operating margins will be broadly consistent. Forecasts are adjusted for the scale up of a new plant (fully operational as at the year end) driving future sales growth (8.6% 5 year CAGR) and improved profitability. The estimated recoverable amount of the CGU exceeded its carrying value by approximately £16m and therefore the Directors concluded that no impairment was required; however the calculations are sensitive to changes in key assumptions. The key assumptions considered by the Directors, where a reasonably possible change could give rise to an impairment, were the terminal value growth rate and discount rate. If the pre-tax discount rate assumption was increased by 2% the CGU's recoverable amount would be reduced to a level comparable with its carrying value. If this higher discount rate assumption was combined with a 1% decrease in the terminal value growth rate, which, although not management's current expectation is considered to be reasonably possible, this would lead to an impairment charge of £1m.

Goodwill arising in the year will be subject to the same review process commencing the year after initial recognition.

13. Property, plant and equipment

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2019	205.6	1,060.9	1,266.5
Exchange differences	(9.2)	(43.5)	(52.7)
Additions	7.3	97.9	105.2
Other disposals and write-offs	(0.3)	(4.7)	(5.0)
Reclassifications to right of use assets	(4.8)	(2.8)	(7.6)
At 31 December 2019	**198.6**	**1,107.8**	**1,306.4**
At 1 January 2020	198.6	1,107.8	1,306.4
Exchange differences	(0.6)	(11.5)	(12.1)
Additions	20.2	94.8	115.0
Acquisitions	32.5	18.4	50.9
Other disposals and write-offs	(0.1)	(3.3)	(3.4)
Reclassifications to intangible assets	6.3	(6.5)	(0.2)
At 31 December 2020	**256.9**	**1,199.7**	**1,456.6**
Accumulated depreciation and impairment losses			
At 1 January 2019	75.6	410.6	486.2
Exchange differences	(4.3)	(20.9)	(25.2)
Charge for the year (note 3)	6.4	40.4	46.8
Other disposals and write-offs	0.1	(4.5)	(4.4)
Reclassifications to right of use assets	(1.9)	(1.0)	(2.9)
Impairments	0.1	0.6	0.7
At 31 December 2019	**76.0**	**425.2**	**501.2**
At 1 January 2020	76.0	425.2	501.2
Exchange differences	0.5	0.5	1.0
Charge for the year (note 3)	6.9	48.6	55.5
Other disposals and write-offs	(0.1)	(2.9)	(3.0)
Reclassifications	(0.1)	0.1	–
Impairments	0.7	0.4	1.1
At 31 December 2020	**83.9**	**471.9**	**555.8**
Net book amount			
At 31 December 2020	**173.0**	**727.8**	**900.8**
At 31 December 2019	122.6	682.6	805.2
At 1 January 2019	130.0	650.3	780.3

The value of assets under construction not yet subject to depreciation at 31 December was as follows:

	2020 £m	2019 £m
Assets under construction		
Land and buildings	**16.9**	6.9
Plant and equipment	**162.4**	294.7
	179.3	301.6

14. Leases

Right of use assets

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2019 (on transition)	43.3	2.7	46.0
Exchange differences	(1.7)	(0.2)	(1.9)
Additions	6.1	5.5	11.6
Remeasurements	(5.1)	(0.3)	(5.4)
Other disposals and write-offs	(0.1)	(0.1)	(0.2)
Reclassifications	5.9	1.7	7.6
At 31 December 2019	**48.4**	**9.3**	**57.7**
At 1 January 2020	48.4	9.3	57.7
Exchange differences	(2.0)	(0.3)	(2.3)
Additions	42.6	1.2	43.8
Remeasurements	0.2	0.2	0.4
Acquisitions	2.4	0.1	2.5
Other disposals and write-offs	(0.5)	(0.5)	(1.0)
At 31 December 2020	**91.1**	**10.0**	**101.1**
Accumulated depreciation and impairment losses			
At 1 January 2019 (on transition)	–	–	–
Exchange differences	(0.3)	–	(0.3)
Charge for the year (note 3)	7.3	1.5	8.8
Reclassifications	2.0	0.9	2.9
Impairments	0.1	–	0.1
At 31 December 2019	**9.1**	**2.4**	**11.5**
At 1 January 2020	9.1	2.4	11.5
Exchange differences	(0.5)	(0.1)	(0.6)
Charge for the year (note 3)	9.0	1.6	10.6
Other disposals and write-offs	(0.4)	(0.4)	(0.8)
Impairments	0.3	–	0.3
At 31 December 2020	**17.5**	**3.5**	**21.0**
Net book amount			
At 31 December 2020	**73.6**	**6.5**	**80.1**
At 31 December 2019	39.3	6.9	46.2
At 1 January 2019 (on transition)	43.3	2.7	46.0

Lease liabilities

	2020 £m	2019 £m
Lease liabilities included in the Group balance sheet		
Current	**10.7**	7.8
Non-current	**71.0**	35.7
	81.7	43.5

A maturity analysis of contractual undiscounted cash flows relating to lease liabilities is presented within note 20.

In addition to the lease liabilities recognised at 31 December 2020 the Group has committed to new lease contracts, commencing in 2021, with a total discounted value of £5.0m.

Notes to the Group Accounts continued

14. Leases continued

Amounts recognised in the Group income statement

	2020 £m	2019 £m
Interest on lease liabilities	**1.5**	1.0
Expenses relating to short-term leases	**0.5**	0.8
Expenses relating to low value leases, excluding short-term leases of low value assets	**0.1**	0.1
Expenses relating to variable lease components	**0.4**	0.6
Depreciation of right of use assets	**10.6**	8.8
Impairment of right of use assets	**0.3**	0.1
Profit on disposal of right of use assets	**(0.1)**	(0.4)
	13.3	11.0

Total cash outflow for leases

	2020 £m	2019 £m
Payment of lease liabilities	**7.6**	8.8
Payment of short-term, low value and variable lease components	**1.0**	1.5
	8.6	10.3

15. Future commitments

	2020 £m	2019 £m
Group capital projects		
At 31 December the Directors had authorised the following expenditure on capital projects:		
Contracted, but not provided for		
Property, plant and equipment	**41.1**	32.4
Intangible assets	**1.8**	0.6
Authorised, but not contracted for		
Property, plant and equipment	**72.3**	98.6
Intangible assets	**3.6**	3.8
	118.8	135.4

16. Investments

The amounts recognised in the balance sheet are as follows:

	2020 £m	2019 £m
Associate	**1.8**	2.8
Other investments	**3.4**	1.9
	5.2	4.7

Other investments of £3.4m (2019: £1.9m) increased during the year as, on 21 August 2020, the Group acquired a 9% minority shareholding in Entekno Materials, an innovative Turkish company who have invented MicNo™ Zinc Oxide technology for solar protection applications. All assets recognised as other investments on the Group balance sheet are non-quoted equity securities measured at fair value.

The Directors believe the carrying value of the investments is supported by their underlying net assets.

The amounts recognised within administrative expenses in the income statement are as follows:

	2020 £m	2019 £m
Share of loss of associate	**1.1**	0.8
Impairment of other investments	**–**	0.6
	1.1	1.4

17. Inventories

	2020 £m	2019 £m
Raw materials	**63.9**	56.7
Work in progress	**39.8**	43.3
Finished goods	**198.9**	168.9
	302.6	268.9

The Group consumed £758.2m (2019: £746.5m) of inventories during the year.

18. Trade and other receivables

	2020 £m	2019 £m
Amounts falling due within one year		
Trade receivables	**241.0**	178.1
Less: provision for impairment of receivables	**(2.5)**	(2.2)
Trade receivables – net	**238.5**	175.9
Other receivables	**41.6**	31.9
Prepayments	**9.8**	9.0
	289.9	216.8

The ageing of the Group's year end overdue receivables against which no provision has been made is as follows:

	2020 £m	2019 £m
Not impaired		
Less than three months	**29.5**	24.3
Three to six months	**5.2**	1.0
Over six months	**4.4**	1.0
	39.1	26.3

The provision for impairment of receivables principally relates to customers in unexpectedly difficult economic circumstances. The overdue receivables against which no provision has been made relate to a number of customers for whom there is no recent history of default, nor any other indication that settlement will not be forthcoming. The other classes within trade and other receivables do not contain impaired assets and are considered to be fully recoverable. The movement in the Group's ageing profile of receivables predominantly reflects new acquisitions in the year. Overall the impact from COVID-19 on the Group's provision for impairment of trade receivables has been immaterial.

The carrying amounts of the Group's receivables are denominated in the following currencies:

	2020 £m	2019 £m
Sterling	**11.9**	15.7
US Dollar	**75.5**	63.0
Euro	**105.4**	65.0
Other	**97.1**	73.1
	289.9	216.8

Movements on the Group's provision for impairment of trade receivables are as follows:

	2020 £m	2019 £m
At 1 January	**2.2**	3.0
Exchange differences	**–**	(0.1)
Charged to income statement	**0.5**	0.2
Net write-off of uncollectible receivables	**(0.2)**	(0.9)
At 31 December	**2.5**	2.2

Amounts charged to the income statement are included within administrative expenses.

19. Trade and other payables

	2020 £m	2019 £m
Trade payables	**97.8**	63.8
Taxation and social security	**10.3**	8.0
Other payables	**37.6**	30.1
Accruals and deferred income	**83.8**	60.1
Contingent consideration (note 28)	**38.1**	2.7
	267.6	164.7

All trade payables are payable within one year. Included in the above are balances payable after one year of £26.1m contingent consideration and £1.0m (2019: £0.8m) other payables.

20. Borrowings, other financial liabilities and other financial assets

This note should be read in conjunction with the further liquidity disclosures in our accounting policies note and the Finance Review on pages 40 to 43.

	2020 £m	2019 £m
Assets		
Non-current assets – Investments	**5.2**	4.7
Current assets – Trade and other receivables (excluding prepayments)	**280.1**	207.8
	285.3	212.5
Current liabilities		
Trade and other payables (excluding taxation, social security, contingent consideration, accruals and deferred income)	**134.4**	93.1
US$100m 5.94% fixed rate 10 year note	**–**	76.4
US$200m 3 year term loan due 2023	**7.0**	–
Unsecured bank loans and overdrafts due within one year or on demand	**30.8**	21.3
Other loans	**11.3**	11.8
Lease liabilities	**10.7**	7.8
	194.2	210.4
Non-current liabilities		
2019 Club facility due 2025	**218.1**	136.2
US$200m 3 year term loan due 2023	**138.5**	–
US$100m 3.75% fixed rate 10 year note	**73.2**	–
€30m 1.08% fixed rate 7 year note	**26.9**	25.6
€70m 1.43% fixed rate 10 year note	**62.7**	59.7
£30m 2.54% fixed rate 7 year note	**30.0**	30.0
£70m 2.80% fixed rate 10 year note	**70.0**	70.0
€50m 1.18% fixed rate 8 year note	**44.8**	42.6
£65m 2.46% fixed rate 8 year note	**65.0**	65.0
US$60m 3.70% fixed rate 10 year note	**43.9**	45.8
Other secured bank loans	**1.8**	0.1
Other unsecured bank loans	**1.3**	1.6
Lease liabilities	**71.0**	35.7
	847.2	512.3

During October 2020, the Group extended the existing 2019 Club facility by a further year, resetting its five-year term and resulting in a maturity date of October 2025. Interest is charged on this agreement at a floating rate based on ICE GBP LIBOR, ICE LIBOR or EURIBOR, depending upon the drawdown currency, plus a variable margin. In July 2020 the Group arranged a three-year amortising term loan for US$200m. Interest is charged on this agreement at a floating rate based on ICE LIBOR plus a variable margin. The margin the Group pays on this borrowing over and above standard rates is determined by the Group's net debt to EBITDA ratio.

	2020 £m	2019 £m
Maturity profile of financial liabilities		
Repayments fall due as follows:		
Within one year		
Bank loans and overdrafts	**37.8**	97.7
Other loans	**11.3**	11.8
	49.1	109.5
Lease liabilities	**10.7**	7.8
	59.8	117.3
After more than one year		
Loans repayable		
Within one to two years	**30.8**	0.2
Within two to five years	**385.4**	193.0
Five years and over	**360.0**	283.4
	776.2	476.6
Lease liabilities	**71.0**	35.7
	847.2	512.3
The minimum lease payments under lease liabilities fall due as follows:		
Within one year	**12.7**	8.4
Within one to two years	**11.8**	6.4
Within two to five years	**19.2**	10.5
Five years and over	**55.0**	26.0
	98.7	51.3
Future finance charges on lease liabilities	**(17.0)**	(7.8)
Present value of lease liabilities	**81.7**	43.5

	2020 £m	2019 £m
Undiscounted maturity analysis of financial liabilities		
Within one year		
Bank loans and overdrafts	**38.3**	98.5
Other loans	**11.8**	12.4
Lease liabilities	**12.7**	8.4
	62.8	119.3
After more than one year		
Loans repayable		
Within one to two years	**45.3**	10.5
Within two to five years	**423.9**	225.1
Five years and over	**391.4**	308.5
Lease liabilities		
Within one to two years	**11.8**	6.4
Within two to five years	**19.2**	10.5
Five years and over	**55.0**	26.0
	946.6	587.0

The analysis above includes estimated interest payable to maturity on the underlying loans. For the loans due after more than one year £14.3m (2019: £10.3m) of the interest falls due within one year of the balance sheet date, £14.0m (2019: £10.3m) within one to two years, £34.0m (2019: £28.5m) within two to five years and £22.1m (2019: £18.4m) beyond five years.

20. Borrowings, other financial liabilities and other financial assets continued

Interest rate and currency profile of Group financial liabilities

	Total £m	Fixed £m	Floating £m	Fixed rate weighted average Interest rate %	Fixed rate weighted average Fixed period Years
Sterling	254.3	165.0	89.3	2.62	5.3
US Dollar	287.0	117.1	169.9	3.73	8.9
Euro	270.2	134.4	135.8	1.28	5.2
Other	95.5	–	95.5	–	–
At 31 December 2020	**907.0**	**416.5**	**490.5**	**2.50**	**6.3**
Sterling	278.0	165.0	113.0	2.62	6.3
US Dollar	175.9	122.2	53.7	5.10	3.6
Euro	131.2	127.9	3.3	1.28	6.2
Other	44.5	–	44.5	–	–
At 31 December 2019	**629.6**	**415.1**	**214.5**	**2.94**	**5.5**

Fair values

Prior to 2016, the Group did not typically utilise complex financial instruments and accordingly the only element of Group borrowings where fair value differed from book value was the US$100m fixed rate ten-year note that was issued in 2010. In January 2020 the existing US$100m fixed rate ten-year note matured and was repaid, this was replaced with a new US$100m fixed rate ten-year note (27 January 2020). On 27 June 2016, the Group issued £100m and €100m of fixed rate notes. On 6 June 2019, the Group issued a further £65m, €50m and US$60m of fixed rate notes.

The table below details a comparison of the book and fair values of the Group's financial assets and liabilities. Where there are no readily available market values to determine fair values, cash flows relating to the various instruments have been discounted at prevailing interest and exchange rates to give an estimate of fair value.

	Book value 2020 £m	**Fair value 2020 £m**	Book value 2019 £m	Fair value 2019 £m
Cash deposits	**106.5**	**106.5**	81.9	81.9
Other investments	**5.2**	**5.2**	4.7	4.7
2019 Club facility due 2025	**(218.1)**	**(218.1)**	(136.2)	(136.2)
US$200m 3 year term loan due 2023	**(145.5)**	**(145.5)**	–	–
US$100m 5.94% fixed rate 10 year note	**–**	**–**	(76.4)	(76.5)
US$100m 3.75% fixed rate 10 year note	**(73.2)**	**(82.9)**	–	–
€30m 1.08% fixed rate 7 year note	**(26.9)**	**(27.5)**	(25.6)	(26.2)
€70m 1.43% fixed rate 10 year note	**(62.7)**	**(67.0)**	(59.7)	(63.1)
£30m 2.54% fixed rate 7 year note	**(30.0)**	**(30.9)**	(30.0)	(30.6)
£70m 2.80% fixed rate 10 year note	**(70.0)**	**(75.2)**	(70.0)	(73.2)
€50m 1.18% fixed rate 8 year note	**(44.8)**	**(47.5)**	(42.6)	(44.4)
£65m 2.46% fixed rate 8 year note	**(65.0)**	**(68.9)**	(65.0)	(66.4)
US$60m 3.70% fixed rate 10 year note	**(43.9)**	**(49.9)**	(45.8)	(47.7)
Other bank borrowings	**(33.9)**	**(33.9)**	(23.0)	(23.0)
Other loans	**(11.3)**	**(11.3)**	(11.8)	(11.8)
Contingent consideration	**(38.1)**	**(38.1)**	(2.7)	(2.7)
Lease liabilities	**(81.7)**	**(81.7)**	(43.5)	(43.5)

For financial instruments with a remaining life of greater than one-year, fair values are based on cash flows discounted at prevailing interest rates. Accordingly, the fair value of cash deposits and short-term borrowings approximates to the book value due to the short maturity of these instruments. The same applies to trade and other receivables and payables excluded from the above analysis.

Financial instruments

Financial instruments measured at fair value use the following hierarchy:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1)
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2)
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

All of the Group's financial instruments are classed as level 2 with the exception of contingent consideration, other investments and lease liabilities, which are classed as level 3.

Borrowing facilities

As at 31 December 2020, the Group had undrawn committed facilities of £378.3m (2019: £459.9m). In addition, the Group had other undrawn facilities of £50.1m (2019: £65.1m) available. Of the Group's total committed facilities of £1,244.3m, £1,237.0m expire after 2021. New and repaid borrowings disclosed in the Group Statement of Cash Flows reflect routine short-term cash management, comprising regular monthly drawdowns and repayments on the Group's revolving credit facilities.

Financial risk factors

The Group's activities expose it to a variety of financial risks: currency risk, interest rate risk, liquidity risk, and credit risk. The Group's overall risk management strategy is approved by the Board and implemented and reviewed by the Risk Management Committee. Detailed financial risk management is then delegated to the Group Finance department which has a specific policy manual that sets out guidelines to manage financial risk. Regular reports are received from all sectors and regional operating units to enable prompt identification of financial risks so that appropriate action may be taken. In the management definition of capital the Group includes ordinary and preference share capital and net debt.

Currency risk

The Group operates internationally and is exposed to currency risk arising from various currency exposures, primarily with respect to the US Dollar and the Euro. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations. Entities in the Group use foreign currency bank balances to manage their foreign exchange risk arising from future commercial transactions, recognised assets and liabilities. The Group's risk management policy is to manage transactional risk up to three months forward. The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Group's foreign operations is not specifically hedged but is reduced primarily through borrowings denominated in the relevant foreign currencies where it is efficient to do so.

For 2020, had the Group's basket of reporting currencies been 10% weaker/stronger than the actual rates experienced, post-tax profit for the year would have been £18.9m (2019: £18.2m) lower/higher than reported, primarily as a result of the translation of the profits of the Group's overseas entities, and equity would have been £141.5m (2019: £69.9m) lower/higher.

Interest rate risk

The Group has both interest bearing assets and liabilities. In 2016, the Group had a policy of maintaining no more than 60% of its gross borrowings at fixed interest rates in normal circumstances. During 2016, the Group increased its amount of fixed rate debt following payment of the £136m special dividend and consequent increase in core debt requirements. Notes were issued in the amounts of £100m and €100m with an average maturity of 4.6 years and interest rate of 2.06%. During 2017, the policy formally increased the upper limit for fixed rate debt to 75% of gross borrowings. During 2019, the Group increased its amount of fixed rate debt following payment of the £151.5m special dividend. Notes were issued in the amounts of £65m, €50m and US$60m with an average maturity of 7.1 years and interest rate of 2.44%. In January 2020 the Group repaid its US$100m ten-year note carrying a fixed rate of 5.94%, and replaced it with a US$100m ten-year note carrying a fixed rate of 3.75%. At 31 December 2020, approximately 47% of Group borrowings were at fixed rates.

At 31 December 2020, aside from the loan notes referred to above, all Group debt and cash was exposed to repricing within 12 months of the balance sheet date.

At 31 December 2020, the Group's fixed rate debt was at a weighted average rate of 2.50% (2019: 2.94%). The Group's floating rate liabilities are predominantly based on LIBOR and its overseas equivalents.

Based on the above, had interest rates moved by ten basis points in the territories where the Group has substantial borrowings, post-tax profits would have moved by £0.4m (2019: £0.2m) due to a change in interest expense on the Group's floating rate borrowings.

Liquidity risk

The Group actively maintains a mixture of long-term and short-term committed facilities designed to ensure that the Group has sufficient funds available for operations and planned investments.

On a regular basis, management monitors forecasts of the Group's cash flows against both internal targets and those targets imposed by external lenders. The Group has substantial committed, unused facilities and the Directors are confident this situation will remain the case for the foreseeable future.

Credit risk

The Group has no significant concentrations of credit risk. It has policies in place to ensure that sales of products are made to customers with an appropriate credit history. Derivative counterparties and cash transactions are limited to high-credit quality financial institutions. The Group has policies that limit the amount of credit exposure to any individual financial institution.

20. Borrowings, other financial liabilities and other financial assets continued

Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, as well as maintaining an optimal capital structure to reduce overall cost of capital.

In order to maintain this optimal structure, the Group may adjust the amount of dividends paid, issue new shares, return capital to shareholders or dispose of assets to reduce net debt. Given the Group's strong balance sheet and sustained trading growth, the Group announced a dividend policy in 2011 of paying a dividend of between 40% and 50% of sustainable earnings. Further details can be found in the Finance Review on pages 40 to 43.

Underlying growth coupled to Return on Invested Capital (ROIC) is the key perceived driver of shareholder value within the Group. The Group's ROIC now stands at 14.6% against a post-tax Weighted Average Cost of Capital (WACC) of 6.2%, thus hitting the Group's target of maintaining ROIC at two to three times WACC. In addition, the Group employs two widely used ratios to measure its ability to service its debt. Both net debt/EBITDA and EBITDA interest cover were well ahead of target in 2020. Further details can be found in the Finance Review on pages 40 to 43. The Group was in compliance with its covenant requirements throughout the year. Additional information on progress against Key Performance Indicators can be found on pages 38 and 39.

21. Provisions

	Environmental £m	Restructuring £m	Other £m	Total £m
At 1 January 2020	8.1	7.7	0.4	16.2
Exchange differences	(0.2)	(0.1)	–	(0.3)
Released to the income statement	(0.1)	–	–	(0.1)
Charged to the income statement	0.2	2.8	1.3	4.3
Cash paid against provisions and utilised	(1.7)	(7.7)	(0.1)	(9.5)
At 31 December 2020	**6.3**	**2.7**	**1.6**	**10.6**

Analysis of total provisions

	2020 £m	2019 £m
Current	**6.7**	10.9
Non-current	**3.9**	5.3
	10.6	16.2

Provisions are made where a constructive or legal obligation has arisen from a past event, can be quantified and where the timing of the transfer of economic benefits relating to the provisions cannot be ascertained with any degree of certainty.

The environmental provision relates to soil and potential groundwater contamination on a number of sites, both currently in use and previously occupied, in Europe and the Americas.

In relation to the environmental provision, the Directors expect that the balance will be utilised within ten years. Provisions for remediation costs are made when there is a present obligation, it is probable that expenditures for remediation work will be required and the cost can be estimated within a reasonable range of possible outcomes. The costs are based on currently available facts and prior experience. Environmental liabilities are recorded at the estimated amount at which the liability could be settled at the balance sheet date. Remediation of environmental damage typically takes a long time to complete due to the substantial amount of planning and regulatory approvals normally required before remediation activities can begin. In addition, increases in or releases of environmental provisions may be necessary whenever new developments occur or additional information becomes available. Consequently, environmental provisions can change significantly and the timing and quantum of costs are inherently uncertain. The level of environmental provision is based on management's best estimate of the most likely outcome for each individual exposure.

The restructuring provision primarily relates to the Group's cost saving actions in 2019. This provision is expected to be utilised within one year.

The Group has also considered the impact of discounting on its provisions and has concluded that, as a consequence of the significant utilisation expected in a relatively short timescale, the impact is not material.

22. Ordinary share capital

Ordinary shares of 10.61p (2019: 10.61p)	2020 £m	2019 £m
Allotted, called up and fully paid		
At 1 January – 131,906,881 (2019: 131,906,881) ordinary shares	**14.0**	14.0
Issued in the year	**1.1**	–
At 31 December – 142,536,884 (2019: 131,906,881) ordinary shares	**15.1**	14.0

On 20 November 2020, following consultation with shareholders, the Company issued 10,630,003 ordinary shares at a price of 5900p per share, raising £615.5m net of fees resulting in a share premium of £614.4m.

During 2020 options were granted to employees under the Croda International Plc Sharesave Scheme to subscribe for 74,578 ordinary shares at an option price of 4804p per share and under the Croda International Plc International Sharesave Plan to subscribe for 226,138 ordinary shares at an option price of 4804p per share. Conditional awards over 174,312 ordinary shares were granted under the Performance Share Plan during the year. Also granted in the year were 7,134 shares under the Restricted Share Plan.

During the year consideration of £2.4m was received on the exercise of options over 79,126 shares. The options were satisfied with shares transferred from the Group's employee share trusts. Since the year end a further 383 shares have been transferred from the trusts.

The outstanding options to subscribe for ordinary shares were as follows at the balance sheet date:

	Year option granted	Number of shares	Price	Options exercisable from
Croda International Plc Sharesave Scheme	2017	3,745	3092p	1 Nov 2020 to 30 Apr 2021
	2018	62,400	4144p	1 Nov 2021 to 30 Apr 2022
	2019	90,312	3898p	1 Nov 2022 to 30 Apr 2023
	2020	74,318	4804p	1 Nov 2023 to 30 Apr 2024
Croda International Plc International Sharesave Plan (2009)	2018	187,936	4144p	1 Nov 2021 to 30 Nov 2021
	2019	270,789	3898p	1 Nov 2022 to 30 Nov 2022
	2020	223,031	4804p	1 Nov 2023 to 30 Nov 2023
Croda International Plc Performance Share Plan (2014)	2018	147,606	Nil	13 Mar 2021
	2019	142,736	Nil	12 Mar 2022
	2020	122,216	Nil	25 Mar 2023
	2020	48,447	Nil	29 Apr 2023
Croda International Plc Deferred Bonus Share Plan	2018	19,315	Nil	13 Mar 2021
	2019	8,812	Nil	12 Mar 2022
Croda International Plc Deferred Bonus Discretionary Arrangement	2018	652	Nil	13 Mar 2021
Croda International Plc Restricted Share Plan	2018	6,751	Nil	20 Mar 2021
	2019	4,821	Nil	26 Mar 2022
	2019	582	Nil	9 Aug 2022
	2020	7,134	Nil	25 Mar 2023

23. Share-based payments

The impact of share-based payment transactions on the Group's financial position is as follows:

	2020 £m	2019 £m
Analysis of amounts recognised in the income statement:		
Charged in respect of equity settled share-based payment transactions	**2.5**	0.1
Charged in respect of cash settled share-based payment transactions	**11.1**	5.0
	13.6	5.1
Analysis of amounts recognised in the balance sheet:		
Liability in respect of cash settled share-based payment transactions	**9.2**	7.6

The key elements of each scheme along with the assumptions employed to arrive at the charge in the income statement are set out below. Where appropriate the expected volatility has been based on historical volatility considering daily share price movements over periods equal to the expected future life of the awards and the risk free rate is based on the Bank of England's projected nominal yield curve with appropriate duration.

23. Share-based payments continued

Croda International Plc Sharesave Scheme ('Sharesave')

The Sharesave scheme, established in 1983 and renewed in 2013, grants options annually in September to employees of the Group at a fixed exercise price, being the market price of the Company's shares at the grant date discounted by up to 20%. Employees then enter into a savings contract over three to five years and, subject to continued employment, purchase options at the end of the period based on the amount saved. Options are then exercisable for a six month period following completion of the savings contract. For options granted in the year, the fair value per option granted and the assumptions used in the calculation of the value are as follows:

	2020	2019
Grant date	10 Sep 2020	12 Sep 2019
Share price at grant date	6078p	4948p
Exercise price	4804p	3898p
Number of employees	692	700
Shares under option	74,578	94,433
Vesting period	Three years	Three years
Expected volatility	20%	20%
Option life	Six months	Six months
Risk free rate	-0.1%	0.5%
Dividend yield	1.5%	1.8%
Possibility of forfeiture	7.5% p.a.	7.5% p.a.
Fair value per option at grant date	1337.2p	1103.4p
Option pricing model	Black Scholes	Black Scholes

A reconciliation of option movements over the year is as follows:

	2020		2019	
	Number	Weighted average exercise price	Number	Weighted average exercise price
Outstanding at 1 January	241,912	3681p	263,111	3174p
Granted	74,578	4804p	94,433	3898p
Forfeited	(6,659)	3895p	(11,363)	3421p
Exercised	(79,126)	3081p	(104,269)	2627p
Outstanding at 31 December	230,705	4243p	241,912	3681p
Exercisable at 31 December	3,745	3092p	6,067	2639p
For options exercised in year, weighted average share price at date of exercise		5969p		4856p
Weighted average remaining life at 31 December (years)	2.4		2.4	

Croda International Plc International Sharesave Plan 2009 ('International')

The International scheme, established in 1999 and renewed in 2009, has the same option pricing model, savings contract and vesting period as the Sharesave scheme. At exercise, employees are paid a cash equivalent for each option purchased, being the difference between the exercise price and market price at the exercise date. For options granted in the year, the fair value per option granted and the assumptions used in the calculation of the value are as follows:

	2020	2019
Grant date	10 Sep 2020	12 Sep 2019
Share price at grant date	6078p	4948p
Exercise price	4804p	3898p
Number of employees	2,287	2,235
Shares under option	226,138	299,797
Vesting period	Three years	Three years
Expected volatility	20%	20%
Option life	One month	One month
Risk free rate	-0.2%	0.5%
Dividend yield	1.4%	1.8%
Possibility of forfeiture	7.5% p.a.	7.5% p.a.
Fair value per option at 31 December	1741.3p	1239.0p
Option pricing model	Black Scholes	Black Scholes

A reconciliation of option movements over the year is as follows:

	2020 Number	2020 Weighted average exercise price	2019 Number	2019 Weighted average exercise price
Outstanding at 1 January	**726,941**	**3704p**	810,102	3197p
Granted	**226,138**	**4804p**	299,797	3898p
Forfeited	**(48,929)**	**3725p**	(67,852)	3396p
Exercised	**(222,394)**	**3106p**	(315,106)	2653p
Outstanding at 31 December	**681,756**	**4262p**	726,941	3704p
For options exercised in year, weighted average share price at date of exercise		**6063p**		4841p
Weighted average remaining life at 31 December (years)	**1.9**		1.9	

Croda International Plc Performance Share Plan 2014 ('PSP')

The PSP scheme was established in 2014 and replaced the Company's previous Executive long term incentive plans. The PSP provides for awards of free shares (ie either conditional shares or nil-cost options) normally made annually which vest after three years dependent upon an EPS performance related sliding scale (non-market condition), an NPP growth measure (non-market condition), sustainability conditions in relation to decarbonisation roadmaps and emissions (non-market conditions) and the Group's total shareholder return (market condition). The PSP is discussed in detail in the Directors' Remuneration Report (pages 76 to 101). Shares (on an after tax basis) are subject to a two year post vesting holding period. For options granted in the year, the fair value per option granted and the assumptions used in the calculation of the value are as follows:

	2020 Market condition	2020 Non-market condition	2020 Market condition	2020 Non-market condition	2019 Market condition	2019 Non-market condition
Grant date	**29 Apr 2020**	**29 Apr 2020**	**25 Mar 2020**	**25 Mar 2020**	12 Mar 2019	12 Mar 2019
Share price at grant date	**4936p**	**4936p**	**4280p**	**4280p**	4874p	4874p
Number of employees	**2**	**2**	**57**	**57**	63	63
Shares under conditional award	**31,491**	**16,956**	**81,812**	**44,053**	60,239	90,358
Vesting period	**Three years**	**Three years**	**Three years**	**Three years**	Three years	Three years
Expected volatility	**20%**	**20%**	**20%**	**20%**	20%	20%
Dividend yield	**1.8%**	**1.8%**	**2.1%**	**2.1%**	1.7%	1.7%
Possibility of forfeiture	**3.45% p.a.**	**3.45% p.a.**	**3.45% p.a.**	**3.45% p.a.**	3.45% p.a.	3.45% p.a.
Fair value per option at grant date	**3352p**	**4676p**	**3022p**	**4021p**	2315p	4623p
Option pricing model	**Closed form valuation**	**Closed form valuation**	**Closed form valuation**	**Closed form valuation**	Closed form valuation	Closed form valuation

A reconciliation of option movements over the year is as follows:

	2020 Number	2020 Weighted average exercise price	2019 Number	2019 Weighted average exercise price
Outstanding at 1 January	**513,956**	**–**	656,684	–
Granted	**174,312**	**–**	150,597	–
Forfeited	**(112,018)**	**–**	(36,553)	–
Exercised	**(115,245)**	**–**	(256,772)	–
Outstanding at 31 December	**461,005**	**–**	513,956	–
For options exercised in year, weighted average share price at date of exercise		**4259p**		5055p
Weighted average remaining life at 31 December (years)	**1.3**		1.0	

Croda International Plc Deferred Bonus Share Plan ('DBSP')

The DBSP scheme was established in 2014. Under the DBSP, one third of any annual bonuses due to certain senior executives are deferred. The size of award is determined by the amount of the total bonus divided by one third and converted into a number of Croda shares using the market value of shares at the time the award is granted. Awards are increased by the number of shares equating to the equivalent value of any dividend paid during the option period. The awards vest on the third anniversary of the date of grant, unless the recipient has been dismissed for cause. There are no performance conditions applied to the award. The DBSP is also discussed in the Directors' Remuneration Report (pages 76 to 101).

23. Share-based payments continued

	2020	2019
Grant date	–	12 Mar 2019
Share price at grant date	–	4874p
Number of employees	–	10
Shares under conditional award	–	8,538
Vesting period	–	Three years

A reconciliation of option movements over the year is as follows:

	2020		2019	
	Number	**Weighted average exercise price**	Number	Weighted average exercise price
Outstanding at 1 January	**127,588**	–	196,808	–
Granted	–	–	8,538	–
Dividend enhancement	**422**	–	2,143	–
Exercised	**(99,883)**	–	(79,901)	–
Outstanding at 31 December	**28,127**	–	127,588	–
For options exercised in year, weighted average share price at date of exercise		**4259p**		5050p
Weighted average remaining life at 31 December (years)	**0.5**		0.5	

Croda International Plc Deferred Bonus Discretionary Share Arrangement

In addition to the awards under the DBSP, nil cost options over 652 shares have been awarded to similarly defer bonus entitlement where the DBSP cannot be used due to employment having ceased before the grant date. These options will be deemed to be exercised automatically on the date falling three years after the date of grant. As of 31 December 2020, the weighted average remaining life was 0.2 years.

Croda International Plc Restricted Share Plan ('RSP')

The RSP scheme was established in 2018 and provides for awards of free shares or cash equivalent to a limited number of employees not eligible for the PSP scheme, based on a percentage of salary. The awards vest on the third anniversary of the date of grant, subject to the condition that the employee remains employed by the Group. There are no performance conditions applied to the award. On the vesting date, UK employees will be awarded free shares and non-UK employees will be paid a cash equivalent based on the market price.

	2020		2019
Grant date	**25 Mar 2020**	9 Aug 2019	26 Mar 2019
Share price at grant date	**4280p**	4744p	4946p
Number of employees	**35**	2	32
Shares under conditional award	**7,134**	582	5,552
Vesting period	**Three years**	Three years	Three years
Expected volatility	**20%**	20%	20%
Dividend yield	**2.1%**	1.8%	1.8%
Possibility of forfeiture	**3.45% p.a.**	3.45% p.a.	3.45% p.a.
Fair value per option at grant date	**4021p**	4502p	4694p
Option pricing model	**Closed form valuation**	Closed form valuation	Closed form valuation

A reconciliation of option movements over the year is as follows:

	2020		2019	
	Number	**Weighted average exercise price**	Number	Weighted average exercise price
Outstanding at 1 January	**12,393**	–	6,751	–
Granted	**7,134**	–	6,134	–
Forfeited	**(239)**	–	(492)	–
Exercised	–	–	–	–
Outstanding at 31 December	**19,288**	–	12,393	–
For options exercised in year, weighted average share price at date of exercise		–		–
Weighted average remaining life at 31 December (years)	**1.3**		1.7	

Croda International Plc Share Incentive Plan ('SIP')

The SIP was established in 2003 and has similar objectives to the Sharesave scheme in terms of increasing employee retention and share ownership. Under the SIP scheme, employees enter into an agreement to purchase shares in the Company each month. For each share purchased by an employee, the Company awards a matching share which passes to the employee after three years' service. The matching shares are allocated each month at market value with this fair value charge being recognised in the income statement in full in the year of allocation.

24. Preference share capital

	2020 £m	2019 £m
The authorised, issued and fully paid preference share capital comprises:		
615,562 5.9% preference shares of £1 (2019: 615,562)	**0.6**	0.6
498,434 6.6% preference shares of £1 (2019: 498,434)	**0.5**	0.5
21,900 7.5% preference shares of £1 (2019: 21,900)	**–**	–
	1.1	1.1

The preference shares have no redemption rights and carry no voting rights other than in certain circumstances affecting the rights of the preference shareholders, details of which are set out in the Company's Articles of Association. The three classes of preference shares rank *pari passu* with each other but ahead of the ordinary shares on a winding up. Rights on a winding up are limited to repayment of capital and any arrears of dividends.

25. Shareholders' equity

Croda International Plc Qualifying Share Ownership Trust (QUEST), Croda International Plc Employee Benefit Trust (CIPEBT) and Croda International Plc AESOP Trust (AESOP) each hold shares purchased on the open market or transferred from treasury shares to satisfy the future issue of shares under the Group's share option schemes. As at 31 December 2020 the QUEST had a net amount due from the Company of £13.6m (2019: £11.1m) and held 93,221 (2019: 172,952) shares transferred at a nil cost (2019: nil cost) with a market value of £6.1m (2019: £8.9m). As at 31 December 2020 the CIPEBT was financed by a repayable on demand loan to the Company of £21.9m (2019: £12.6m) and held 910 (2019: 910) shares transferred at a nil cost (2019: nil cost) with a market value of £0.1m (2019: £0.1m).

As at 31 December 2020 the AESOP had issued all its previously held shares, as financed by the Company, and thus had no residual loan balance with the Company. All of the shares held by the QUEST and CIPEBT were under option at 31 December 2020 and, except for a nominal amount, the right to receive dividends has been waived.

As at 31 December 2020 the total number of treasury shares held was 3,018,203 (2019: 3,018,203) with a market value of £199.1m (2019: £154.5m).

26. Non-controlling interests in equity

	2020 £m	2019 £m
At 1 January	**7.0**	7.5
Exchange differences	**0.1**	(0.4)
Acquisition of subsidiary with non-controlling interests	**2.2**	–
Income allocated to non-controlling interests	**–**	(0.1)
At 31 December	**9.3**	7.0

27. Related party transactions

The Group has no related party transactions, with the exception of remuneration paid to key management and Directors which is included in note 10.

28. Business combinations

2020 Acquisitions

On 12 August 2020, the Group acquired 100% of the shares and voting interests of Avanti Polar Lipids, LLC, a knowledge-intensive leader in lipid-based drug delivery technologies for next generation pharmaceuticals. Based in Alabama in the US, Avanti creates and makes high-purity polar lipids that are increasingly being used as delivery systems for complex therapeutic drugs and in next-generation mRNA vaccines. The acquisition will continue to operate under its existing brand, led by the current management team, and will form part of our Health Care business (Life Sciences sector). The acquisition will more than double Croda's research and development (R&D) capability in drug delivery and also provide a new channel to market for Croda's ingredients for early-stage pharmaceutical research.

On 24 November 2020, the Group acquired 100% of the shares and voting interests of Fragrance Spanish Topco, S.L. trading as Iberchem ('Iberchem'), a leading global fragrances and flavours (F&F) company. Headquartered in Murcia, Spain, Iberchem has approximately 850 employees, 14 manufacturing facilities, 10 R&D centres and a commercial presence in 120 countries. The acquisition will form part of the new Consumer Care sector from 2021. The acquisition will create a new full service formulation and fragrance offering for Personal Care and Home Care as well as providing access to a high growth adjacency in the global F&F market with significant exposure to emerging markets.

28. Business combinations continued

The following table summarises the Directors' provisional assessment of the consideration paid in respect of the acquisitions, and the fair value of assets acquired and liabilities assumed.

	Avanti £m	Iberchem £m
Consideration (inclusive of contingent consideration)	**173.9**	**756.5**
Fair value of assets and liabilities acquired		
Intangible assets	91.5	266.7
Property, plant & equipment	21.5	29.4
Right of use assets	–	2.5
Inventories	7.7	25.7
Trade and other receivables[1]	7.3	60.7
Cash and cash equivalents	1.1	28.4
Trade and other payables	(16.3)	(41.3)
Lease liabilities	–	(2.6)
Deferred tax	–	(64.8)
Total identifiable net assets	**112.8**	**304.7**
NCI, based on their proportionate interest in the recognised amounts of the assets and liabilities	–	(2.2)
Goodwill	**61.1**	**454.0**

1. The fair value of Avanti and Iberchem's trade and other receivables on acquisition included gross contractual amounts of £7.3m and £67.8m respectively.

Total consideration for Avanti is inclusive of £35.5m contingent consideration, representing the gross fair value at the date of acquisition of £42.1m before discounting. The contingent consideration is capped at a maximum of £46.0m (undiscounted) excluding a potential maximum payable of £11.5m in relation to post acquisition employment (which will be charged to the Income Statement). The additional consideration is payable semi-annually over three years based on the revenue from near-term commercial opportunities using Avanti's lipid-based solutions which were not included in the valuation for payment of the initial consideration. Iberchem consideration represents cash only.

Goodwill is attributable to the synergies expected to arise from the combination of the acquired technologies and the Group's global sales and marketing network. Avanti goodwill will be tax deductible. Iberchem goodwill will not be deductible for tax purposes.

Acquisition-related costs of £11.7m have been charged to administration expenses in the income statement for the year ended 31 December 2020 (2019: £0.3m). Post acquisition Avanti and Iberchem contributed revenue of £29.5m and £22.1m and adjusted operating profit of £7.9m and £4.7m, respectively. Had the acquisitions been made on 1 January 2020, the Group's revenue would have been £1,547.1m with adjusted operating profit of £347.1m.

2019 Acquisitions

On 16 July 2019, the Group acquired Rewitec® GmbH, a German based technology business specialising in improving the efficiency and longevity of wind turbines and moving machinery through the application of their patented additives. Rewitec was acquired for consideration of £6.8m, with identifiable net assets of £4.4m, generating goodwill of £2.4m. During 2020, the Group completed the fair value review relating to its 2019 acquisition. This review did not identify any changes to the asset base or goodwill.

29. Contingent liabilities

The Group is subject to various claims which arise from time to time in the course of its business including, for example, in relation to commercial matters, product quality or liability, employee matters and tax audits. The Group is also involved in certain environmental legal actions and proceedings, which relate to our operations in the USA and are a matter of public record. These matters are reviewed on a regular basis and where possible an estimate is made of the potential financial impact on the Group. In appropriate cases a provision is recognised based on advice, best estimates and management judgement. Where it is too early to determine the likely outcome of these matters, no provision is made. The Group also considers it has insurance in place in relation to any significant contingent liabilities. Whilst the Group cannot predict the outcome of any current or future such matters with any certainty, it currently believes the likelihood of any material liabilities to be remote, and that such liabilities, if any, will not have a material adverse effect on its consolidated income, financial position or cash flows.

30. Post balance sheet events

Subsequent to 31 December 2020 the Group has agreed to acquire botanicals specialist Alban Muller to expand our portfolio of natural beauty ingredients for a total consideration of €25m. The acquisition is expected to complete in March 2021.

Company Balance Sheet

at 31 December 2020

	Note	2020 £m	2019 £m
Fixed assets			
Intangible assets	D	**0.8**	0.2
Tangible assets	E	**1.5**	1.7
Investments			
Shares in Group undertakings	F	**1,369.5**	561.1
Other investments other than loans	G	**–**	–
		1,371.8	563.0
Current assets			
Debtors	H	**1,479.5**	1,632.5
Deferred tax asset	I	**0.1**	0.4
Cash and cash equivalents		**–**	2.6
		1,479.6	1,635.5
Current liabilities			
Creditors: Amounts falling due within one year	J	**(64.9)**	(52.8)
Borrowings	K	**(0.4)**	(12.6)
		(65.3)	(65.4)
Net current assets		**1,414.3**	1,570.1
Total assets less current liabilities		**2,786.1**	2,133.1
Non-current liabilities			
Borrowings	K	**(495.4)**	(389.0)
Retirement benefit liabilities	L	**(0.7)**	(2.0)
		(496.1)	(391.0)
Net assets		**2,290.0**	1,742.1
Capital and reserves			
Ordinary share capital		**15.1**	14.0
Preference share capital		**1.1**	1.1
Called up share capital		**16.2**	15.1
Share premium account		**707.7**	93.3
Reserves[1]		**1,566.1**	1,633.7
Total shareholders' funds		**2,290.0**	1,742.1

1. Included within Reserves is profit after tax of £43.0m (2019: £49.6m)

The financial statements on pages 155 to 161 were approved by the Board on 1 March 2021 and signed on its behalf by

Anita Frew
Chair

Jez Maiden
Group Finance Director

Registered in England number 206132

Company Financial Statements continued

Company Statement of Changes in Equity

for the year ended 31 December 2020

	Note	Share capital £m	Share premium account £m	Capital redemption reserve £m	Revaluation reserve £m	Retained earnings £m	Total £m
At 1 January 2019		15.1	93.3	0.9	2.1	1,853.3	1,964.7
Profit for the year attributable to equity shareholders		–	–	–	–	49.6	49.6
Other comprehensive expense		–	–	–	–	(0.9)	(0.9)
Transactions with owners:							
Dividends on equity shares	8	–	–	–	–	(266.9)	(266.9)
Share-based payments		–	–	–	–	(0.1)	(0.1)
Transactions in own shares		–	–	–	–	(4.3)	(4.3)
Total transactions with owners		–	–	–	–	(271.3)	(271.3)
Total equity at 31 December 2019		**15.1**	**93.3**	**0.9**	**2.1**	**1,630.7**	**1,742.1**
At 1 January 2020		15.1	93.3	0.9	2.1	1,630.7	1,742.1
Profit for the year attributable to equity shareholders		–	–	–	–	43.0	43.0
Other comprehensive income		–	–	–	–	9.7	9.7
Transactions with owners:							
Dividends on equity shares	8	–	–	–	–	(115.9)	(115.9)
Share-based payments		–	–	–	–	2.5	2.5
Issue of ordinary shares		1.1	614.4	–	–	–	615.5
Transactions in own shares		–	–	–	–	(6.9)	(6.9)
Total transactions with owners		1.1	614.4	–	–	(120.3)	495.2
Total equity at 31 December 2020		**16.2**	**707.7**	**0.9**	**2.1**	**1,563.1**	**2,290.0**

On 20 November 2020, following consultation with shareholders, the Company issued 10,630,003 ordinary shares at a price of 5900p per share, raising £615.5m net of fees resulting in a share premium of £614.4m.

Of the retained earnings, £720.0m (2019: £659.9m) are realised and £843.1m (2019: £970.8m) are unrealised. Details of investments in own shares are disclosed in note 25 of the Group financial statements.

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been applied consistently to all years presented, unless otherwise stated.

A. Accounting policies

Basis of accounting

The Company meets the definition of a qualifying entity under Financial Reporting Standard 100 (FRS 100) issued by the Financial Reporting Council. Accordingly, the Company has adopted FRS 101 'Reduced Disclosure Framework' and has ceased to apply all UK Accounting Standards issued prior to FRS 100. Therefore the recognition, measurement and disclosure requirements of international accounting standards in conformity with the requirements of the Companies Act 2006 ('Adopted IFRSs'), with amendments where necessary in order to comply with the requirements of the Companies Act 2006 ('the Act') have been applied. The financial statements have been prepared under the historical cost convention, in compliance with the provisions of the Act and the requirements of the Listing Rules of the Financial Conduct Authority.

As permitted by FRS 101, the Company has taken advantage of the disclosure exemptions available under the standard in relation to share-based payments, financial instruments, capital management, presentation of comparative information in respect of certain assets, presentation of a cash flow statement, standards not yet effective, impairment of assets and related party transactions. Where required, equivalent disclosures are provided in the Group financial statements of Croda International Plc.

Going concern

The financial statements which appear on pages 155 to 161 have been prepared on a going concern basis as, after making appropriate enquiries, including a review of forecasts, budgets and banking facilities, the Directors have a reasonable expectation that the Company has adequate resources to continue in operational existence.

Principal accounting policies

The accounting policies which have been applied by the Company when preparing the financial statements are in accordance with FRS 101. FRS 101 is based on the recognition and measurement requirements of Adopted IFRSs, under which the Group financial statements have been prepared. As a result, the accounting policies of the Company are consistent with those used by the Group as presented on pages 121 to 127, except for those relating to the recognition and measurement of goodwill and the recognition of revenue, which are not directly relevant to the Company financial statements.

The Group accounting policy for financial risk factors is also relevant to the preparation of the Company financial statements and is disclosed on pages 147 and 148.

B. Profit and loss account

Of the Group's profit for the year, £43.0m (2019: £49.6m) is included in the profit and loss account of the Company which was approved by the Board on 1 March 2021 but which is not presented as permitted by Section 408 Companies Act 2006.

Included in the Company profit and loss account is a charge of £0.1m (2019: £0.1m) in respect of the Company's audit fee.

C. Employees

	2020 £m	2019 £m
Company employment costs including Directors		
Wages and salaries	**6.7**	6.6
Share-based payment charges (note M)	**1.2**	0.9
Social security costs	**1.1**	1.1
Post-retirement benefit costs	**0.7**	0.6
	9.7	9.2

	2020 Number	2019 Number
Average employee numbers by function		
Production	**15**	18
Administration	**39**	39
	54	57

As required by the Companies Act 2006, the figures disclosed above are weighted averages based on the number of employees including Executive Directors. At 31 December 2020, the Company had 54 (2019: 54) employees in total.

Detailed information concerning Directors' remuneration, interests and options is shown in section D of the Directors' Remuneration Report which is subject to audit on pages 91 to 99 which forms part of the Annual Report and Accounts.

Notes to the Company Financial Statements continued

D. Intangible assets

	Computer software £m
Cost	
At 1 January 2020	1.0
Additions	0.6
At 31 December 2020	**1.6**
Accumulated amortisation	
At 1 January 2020	0.8
Charge for the year	–
At 31 December 2020	**0.8**
Net carrying amount	
At 31 December 2020	**0.8**
At 31 December 2019	0.2

E. Tangible assets

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2020	2.2	1.8	4.0
Additions	–	0.1	0.1
Disposals	–	(0.1)	(0.1)
At 31 December 2020	**2.2**	**1.8**	**4.0**
Accumulated depreciation			
At 1 January 2020	1.4	0.9	2.3
Charge for the year	0.1	0.2	0.3
Disposals	–	(0.1)	(0.1)
At 31 December 2020	**1.5**	**1.0**	**2.5**
Net book amount			
At 31 December 2020	**0.7**	**0.8**	**1.5**
At 31 December 2019	0.8	0.9	1.7

F. Shares in Group undertakings

	Shares £m	Loans £m	Total £m
Cost			
At 1 January 2020	339.9	250.5	590.4
Exchange differences	–	4.5	4.5
Additions	771.4	104.0	875.4
Amounts repaid	–	(71.5)	(71.5)
At 31 December 2020	**1,111.3**	**287.5**	**1,398.8**
Impairment			
At 1 January 2020	27.8	1.5	29.3
Impairment in the year	–	–	–
At 31 December 2020	**27.8**	**1.5**	**29.3**
Net book value			
At 31 December 2020	**1,083.5**	**286.0**	**1,369.5**
At 31 December 2019	312.1	249.0	561.1

The undertakings which affect the financial statements are listed on pages 162 to 164.

Additions to shares in the year include £770.0m in relation to the acquisition of Fragrance Spanish Topco, S.L. ('Iberchem') and £1.4m of capital contributions in relation to share based payments.

The Directors believe that the carrying value of the investments is supported by their underlying net assets or forecast cash generation.

G. Other investments other than loans

	2020 £m	2019 £m
At 1 January	–	0.6
Impairment	–	(0.6)
At 31 December	–	–

Other investments decreased during 2019 following a review of their carrying value which resulted in an impairment charge of £0.6m.

H. Debtors

	2020 £m	2019 £m
Amounts owed by Group undertakings	**1,452.2**	1,589.6
Corporation tax	**27.0**	42.1
Other receivables	**0.1**	0.5
Prepayments	**0.2**	0.3
	1,479.5	1,632.5

Although the amounts owed by Group undertakings have no fixed date of repayment, £1,450.2m (2019: £1,585.1m) is expected to be collected after one year. Of the amount at 31 December 2020, £1,449.6m will continue to attract interest from 1 January 2021 at a floating rate based on the main facility agreement. The remainder will continue to be interest free.

I. Deferred tax

The deferred tax balances included in the balance sheet are attributable to the following:

	2020 £m	2019 £m
Retirement benefit obligations	**0.1**	0.4
The movement on deferred tax balances during the year is summarised as follows:		
At 1 January	**0.4**	(0.2)
Deferred tax charged through the profit and loss account	**(0.2)**	–
Deferred tax (charged)/credited to other comprehensive income	**(0.1)**	0.6
At 31 December	**0.1**	0.4

Deferred tax assets were recognised in all cases where such assets arose, as it was probable that the assets would be recovered.

J. Creditors: Amounts falling due within one year

	2020 £m	2019 £m
Amounts falling due within one year		
Trade payables	**2.3**	–
Taxation and social security	**1.5**	1.5
Amounts owed to Group undertakings	**51.0**	46.8
Other payables	**3.3**	3.4
Accruals and deferred income	**6.8**	1.1
	64.9	52.8

The amounts owed to Group undertakings are interest free, unsecured and have no fixed date of repayment.

Notes to the Company Financial Statements continued

K. Borrowings

The Company's objectives, policies and strategies in respect of financial instruments are outlined in the accounting policies note on page 126 which forms part of the Annual Report and Accounts. Short term receivables and payables have been excluded from all of the following disclosures.

	2020 £m	2019 £m
Maturity profile of financial liabilities		
2019 Club facility due 2025	**196.1**	96.1
€30m 1.08% fixed rate 7 year note	**26.8**	25.6
€70m 1.43% fixed rate 10 year note	**62.7**	59.7
£30m 2.54% fixed rate 7 year note	**30.0**	30.0
£70m 2.80% fixed rate 10 year note	**70.0**	70.0
€50m 1.18% fixed rate 8 year note	**44.8**	42.6
£65m 2.46% fixed rate 8 year note	**65.0**	65.0
Bank loans and overdrafts repayable on demand	**0.4**	12.6
	495.8	401.6
Repayments fall due as follows:		
Within one year		
Bank loans and overdrafts	**0.4**	12.6
	0.4	12.6
After more than one year		
Loans repayable		
Within one to five years	**252.9**	151.7
After five years	**242.5**	237.3
	495.4	389.0

L. Post-retirement benefits

In line with the requirements of FRS 101, the Company recognises its share of the UK pension scheme assets and liabilities. A full reconciliation of the Group retirement benefit obligation can be found in note 11 of the Group financial statements on pages 134 to 137. The table below shows the movement in the obligation during the year.

	2020 £m	2019 £m
Opening balance:		
Assets	**53.2**	48.7
Liabilities	**(55.2)**	(47.5)
Net opening retirement benefit (liability)/asset	**(2.0)**	1.2
Movements in the year:		
Service cost – current	**(0.7)**	(0.6)
Service cost – past	**–**	0.1
Interest cost	**–**	0.1
Contributions	**1.4**	0.5
Remeasurements	**0.6**	(3.3)
Closing balance	**(0.7)**	(2.0)

M. Share-based payments

The total charge for the year in respect of share-based remuneration schemes was £1.2m (2019: £0.9m). The grant by the Company of options over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity.

The key elements of each scheme along with the assumptions employed to arrive at the charge in the profit and loss account are set out in note 23 to the Group financial statements.

N. Contingent liabilities

The Company has guaranteed loan capital and bank overdrafts of subsidiary undertakings amounting to £285.3m (2019: £162.3m).

O. Dividends

Details of dividends are disclosed in note 8 of the Group financial statements.

P. Related party transactions

The Company has taken advantage of the exemption available under FRS 101 from disclosing transactions with other Group undertakings. There were no other related party transactions during the year. Information on the Group can be found in note 27 on page 153 of the Group financial statements.