CRODA

Press Release

2 March 2021

Results for the year ended 31 December 2020

Strong strategic delivery built on resilient financial performance

Croda International Plc ("Croda" or the "Group"), the company that uses smart science to create high performance ingredients and technologies that improve lives, announces its full year results for the year ended 31 December 2020.

Highlights

Adjusted[1] results		Full year ended 31 December 2020	2019	% change reported rate	% change constant rate[2]
Sales – Core Business[3]	£million	1,293.9	1,265.9	2.2%	2.3%
Operating profit	£million	319.6	339.7	(5.9)%	(4.0)%
Profit before tax (PBT)	£million	300.6	322.1	(6.7)%	(4.8)%
Basic earnings per share (EPS)	pence	175.5	185.0	(5.1)%	n/a
Return on sales[4]	%	23.0	24.7	(1.7)%pts	n/a
Free cash flow[5]	£million	176.9	201.7	(12.3)%	n/a

Reported results (IFRS)		2020	2019	% change
Sales	£million	1,390.3	1,377.7	0.9%
Operating profit	£million	290.0	319.9	(9.3)%
Profit before tax (PBT)	£million	269.5	302.3	(10.9)%
Basic EPS	pence	155.1	172.8	(10.2)%
Ordinary dividend per share	pence	91.0	90.0	1.1%

Strong strategic delivery in 2020

- Delivering for all stakeholders through our response to COVID-19
  - No employees furloughed or use of government liquidity; supported customers, suppliers, employees and communities
  - Dividends paid in full; 2020 full year dividend increased to 91.0p (52% of adjusted EPS)
- Living our Purpose: Smart science to improve lives™
  - Prioritising COVID-19 vaccines and drug delivery activities
  - Launched sustainability Commitment to be Climate, Land and People Positive by 2030
- Increasing contribution from life science and consumer markets
  - Accounting for over 80% of Group profit
  - Enhancing growth, reducing cyclicality and expanding market opportunities
  - Fast-growing Health Care platform
- Accelerating strategic delivery with almost £1bn of organic and inorganic investments including Avanti and Iberchem acquisitions, part-funded by an equity placing raising gross proceeds of £627m

Resilient financial performance

- Limited adverse financial impact from COVID-19 due to commitment of employees, strength of product portfolio, global footprint, customer intimacy and flexible manufacturing base
- Group underlying sales 2.7% lower; Core Business constant currency (CC) sales growth of 2.3%
- Steady month-on-month sales improvement in the second half in COVID-impacted sectors; underlying Q4 sales in line with prior year in Personal Care and returned to growth in Performance Technologies
- Limited decline in adjusted operating profit of 5.9% (-4.0% CC)
- Robust free cash generation; leverage ratio of 1.8x EBITDA
- IFRS profit before tax reduced to £269.5m (2019: £302.3m), including impact of acquisitions

Record year for Life Sciences; challenges in Personal Care and Performance Technologies

- Outstanding performance in Life Sciences, with record sales and adjusted operating profit
  - Sales 14.6% higher (+14.8% CC), driven by growth in Health Care and Seed Enhancement
  - Adjusted operating profit up 20.8% (+25.4% CC) and return on sales improved to 32.2% (2019: 30.6%), through growth in high value-add niches
  - Acquisition of Avanti Polar Lipids; adds delivery technology to Croda's patient health care, leverages scale-up synergy and opens up wide range of future mRNA and gene therapy drug and vaccine applications
- Combining Personal Care, Home Care and Fragrances to create market-leading Consumer Care platform
  - Adverse impact from COVID lockdowns on consumer demand in 'going out' and prestige beauty channels
  - Personal Care sales 1.9% lower (-1.8% CC) and adjusted operating profit 15.8% lower (-15.3% CC), reflecting adverse business mix
  - Iberchem acquisition unlocks significant growth and synergy in customer cross-sell and emerging markets
- Resilient sales in Performance Technologies but significant adverse profit impact
  - Sales 3.2% lower (-3.2% CC) and adjusted operating profit 22.2% lower (-21.3% CC), reflecting impact of higher operating leverage and adverse business mix

Outlook

While continued COVID-19 restrictions make the near-term outlook for elements of our Consumer Care and Performance Technologies sectors difficult to predict, 2020 sales exit rates were encouraging with consumer and industrial end markets showing signs of recovery. Life Sciences is expected to remain strong. The benefits of recovery, together with the full year impact of Avanti, Iberchem and our Pfizer-BioNTech COVID-19 vaccine contract, are expected to support profitable growth across the business.

Through our Purpose, Smart science to improve lives™, we will continue to increase the positive impact our products deliver for our customers and their consumers, whilst also reducing the negative impact our activities have on our fragile world. The combination of our differentiated business model, healthy innovation pipeline and recent investments is expected to underpin performance and generate value for all our stakeholders.

Steve Foots, Chief Executive Officer, commented:

"During a year in which we have all faced unprecedented challenges, the response and commitment of our employees to maintain business continuity and serve our customers has been outstanding. The strength and quality of Croda's business model has been further tested and proven. Whilst customer demand in certain end markets has inevitably been impacted by the pandemic, Croda's financial performance has been resilient.

"Our strong financial platform has allowed us to make further progress positioning the business to focus on the fast growth markets of the future, capitalising on emerging trends in existing and adjacent markets. We have made significant investments to accelerate delivery of our strategy, notably the acquisitions of Avanti and Iberchem, so that life science and consumer markets now represent over 80% of Croda's profit generation.

"My proudest moment in more than 30 years at Croda came with our critical involvement with the Pfizer-BioNTech COVID-19 vaccine, a fantastic example of our Purpose, Smart science to improve lives™. I am more confident than ever that our recent acquisitions, relentless innovation and emphasis on sustainability will drive our future profitability."

Further information:

An analyst presentation will be available via webcast at 0900 GMT on 2 March 2021 at www.croda.com/investors. To participate, please register in advance. Dial-in details are: +44 20 3936 2999; access code: 516866.

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Sector financial summaries and definitions:

Sales	2020 reported currency £m	Year on year change	Constant currency change[2]	2019 £m
Personal Care	475.9	(1.9)%	(1.8)%	485.2
Life Sciences	401.6	14.6%	14.8%	350.5
Performance Technologies	416.4	(3.2)%	(3.2)%	430.2
Core Business	1,293.9	2.2%	2.3%	1,265.9
Industrial Chemicals	96.4	(13.8)%	(13.4)%	111.8
Group	1,390.3	0.9%	1.1%	1,377.7

Adjusted profit[1]	2020 reported currency £m	Year on year change	Constant currency change[2]	2019 £m
Personal Care	136.5	(15.8)%	(15.3)%	162.1
Life Sciences	129.4	20.8%	25.4%	107.1
Performance Technologies	54.0	(22.2)%	(21.3)%	69.4
Core Business	319.9	(5.5)%	(3.7)%	338.6
Industrial Chemicals	(0.3)	n/a	n/a	1.1
Operating profit	319.6	(5.9)%	(4.0)%	339.7
Net interest	(19.0)	n/a	n/a	(17.6)
Profit before tax	300.6	(6.7)%	(4.8)%	322.1

2020 constant currency[2] sales growth	First Half %	Second Half %	Full Year %
Personal Care	(9.5)	6.2	(1.8)
Life Sciences	(1.7)	33.2	14.8
Performance Technologies	(5.6)	(0.6)	(3.2)
Core Business	(6.0)	11.3	2.3
Industrial Chemicals	(17.8)	(8.9)	(13.4)
Group	(6.9)	9.6	1.1

Definitions

[1]Adjusted results are stated before exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition, and tax thereon. The Board believes that the adjusted presentation (and the columnar format adopted for the Group income statement) assists shareholders by providing a meaningful basis upon which to analyse underlying business performance and make year-on-year comparisons. The same measures are used by management for planning, budgeting and reporting purposes and for the internal assessment of operating performance across the Group. The adjusted presentation is adopted on a consistent basis for each half year and full year results.
[2]Reported currency results reflect current year performance translated at reported rates (actual average exchange rates). Constant currency results reflect current year performance for existing business translated at the prior year's average exchange rates. For constant currency profit, translation is performed using the entity reporting currency. For constant currency sales, local currency rates are translated into the most relevant functional currency of the destination country of sale (for example, sales in Latin America are primarily made in US dollars, which is therefore used as the functional currency). Sales in functional currency are then translated into Sterling using the prior year's average rates for the corresponding period. Constant currency results are reconciled to reported results in the Finance Review. Underlying sales and operating profit reflect constant currency values adjusted to exclude the impact of acquisitions. They are reconciled to reported results in the Finance Review.
[3]The Core Business comprises Personal Care, Life Sciences and Performance Technologies.
[4]Return on sales is adjusted operating profit divided by sales, at reported currency.
[5]Free cash flow is EBITDA less movements in working capital, net capital expenditure, payment of lease liabilities, non-cash pension expense, and interest and tax payments. Net debt comprises cash and cash equivalents (including bank overdrafts), current and non-current borrowings and lease liabilities. The leverage ratio is the ratio of net debt to Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) adjusted to include EBITDA from acquisitions in the last 12-month period. EBITDA is adjusted operating profit plus depreciation and amortisation.
Other non-statutory terms are defined in the 'Alternative Performance Measures' section of the Finance Review.

Chief Executive's Review

Adjusted results are stated before exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition, and tax thereon. Constant currency results reflect current year performance for existing business translated at the prior year's average exchange rates. Alternative performance measures are defined in the Finance Review.

Living our Purpose through our response to COVID-19

Croda's Purpose is Smart science to improve lives™. This sits at the heart of everything we do, not least in the way we responded to the COVID-19 crisis.

Our priorities during the pandemic have been to protect the health and safety of our employees and balance the needs of all our stakeholders fairly. Almost all our employees have been able to work effectively, either onsite, with strict social distancing measures in place, or from home. We have not furloughed any employees, reduced pay or utilised government liquidity facilities. We have supported our customers and suppliers; made supplies of free materials available for hand sanitiser production, COVID-19 vaccine research and PPE provision; and have given financial assistance to the communities closest to our sites. We paid final and interim dividends to shareholders in full during 2020.

The response and commitment of all our employees to maintain business continuity and serve our customers has been outstanding. Everyone has shown remarkable fortitude in the face of an unprecedented challenge and I am grateful to all Croda colleagues around the world. All but two of our nineteen principal manufacturing sites have operated without material disruption, our research and development (R&D) teams have had significant laboratory time, protecting our customers' innovation pipelines, and our sales teams have developed even stronger bonds with customers, supported by investment to enhance our digital presence.

There is no better example to demonstrate how we are using Smart science to improve lives™ than our involvement with COVID-19 vaccines and drugs. My proudest moment in more than 30 years at Croda came with our support for the Pfizer-BioNTech vaccine. We are involved in over 60 projects to deliver COVID-19 vaccines and therapeutic drugs, putting us at the forefront of the fight against this devastating virus.

Delivering our strategy

The strength and quality of Croda's business model has been further demonstrated this year. Whilst customer demand in certain end markets has inevitably been impacted by the crisis, the strength and breadth of our product portfolio across consumer and industrial markets, our global footprint and customer intimacy, together with our flexible manufacturing model, have all helped to reduce its impact on financial performance. This has allowed us to make almost £1bn of organic and inorganic investments in fast growth markets of the future, capitalising on emerging trends in existing and adjacent markets.

2020 saw the full launch of our sustainability strategy, as part of our Purpose. By 2030 we will be Climate, Land and People Positive, delivering our part in a global commitment to limit the planetary temperature rise to 1.5^{o}C. The need for sustainable solutions is disrupting markets, creating significant opportunities for Croda to create market-leading products whilst ensuring that we have a positive effect on the environment and society.

Our strong balance sheet, low leverage and robust liquidity allowed us to invest with confidence to accelerate delivery of our strategy of enhancing future sales and profit in life science and consumer markets. We invested over £120m in organic capital expansion, with a particular focus in growing Health Care and innovation, and over £850m on two acquisitions into key market adjacencies. In Life Sciences, Avanti Polar Lipids adds market-leading lipid technology to Croda's existing patient health capability, opening the door to supporting not only COVID-19 projects but a wide variety of future mRNA and gene therapy drug and vaccine applications, a journey which starts with the Pfizer-BioNTech vaccine. We are combining our Personal Care and Home Care businesses with our acquisition of Iberchem in fragrances to create a Consumer Care leader. Iberchem opens up significant synergies as we are able to service medium-size and smaller customers with a 'one-stop-shop' combining Croda's critical ingredients and Iberchem's on-trend fragrances in stable formulations. As a result of these investments, life science and consumer markets now represent over 80% of Croda's profit generation.

A resilient financial performance

Against the backdrop of the extreme circumstances experienced globally in 2020, Croda's financial performance was resilient. We experienced only a 2.7% decline in underlying sales, supplemented by acquisition sales adding 3.8%, to grow overall by 1.1% in constant currency. In reported currency, sales increased by 0.9% to £1,390.3m (2019: £1,377.7m), with the proportion of sales from NPP products falling slightly to 27.4% (2019: 28.1%). Sales in the second quarter were hard hit by the first round of global lockdowns, with Group constant currency sales almost 12% lower year-on-year. However, the second half saw a steady month-on-month improvement in both consumer and industrial markets, with encouraging exit sales rates, as underlying fourth quarter sales recovered to be in line with prior year in Personal Care and returned to growth in Performance Technologies. Life Sciences also returned to strong underlying double-digit growth in the second half year and both in-year acquisitions performed well.

The challenging conditions saw adjusted operating profit 4.0% lower in constant currency and 5.9% down in reported currency at £319.6m (2019: £339.7m). This reflected an adverse mix in both Personal Care and Performance Technologies, where demand for higher value-add products was most impacted by the pandemic. Return on sales was 23.0% (2019: 24.7%). Adjusted profit before tax was £300.6m (2019: £322.1m) and adjusted basic earnings per share (EPS) were 175.5p (2019:185.0p). This was a creditable performance in challenging market conditions.

Exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition increased to £31.1m (2019: £19.8m), primarily reflecting the acquisition activity during the year. Profit before tax on an IFRS basis was £269.5m (2019: £302.3m).

Robust cash generation supporting continued investment and increased dividend

In 2020 we delivered robust free cash flow of £176.9m (2019: £201.7m). This was after investing in not only our regular capital programme but also in three key areas where we have accelerated our organic investment; innovation; fast growing our China presence; and scaling our drug delivery platform. Although many innovation projects were temporarily paused during lockdown, we ensured that our R&D teams were able to access laboratories, protecting our future innovation pipeline. Adding to over 40 existing customer innovation centres, we invested in new centres in the US, in biotechnology in the UK and in Shanghai.

China offers significant growth opportunities as part of our 'fast grow' strategy. During 2020, we added over 15% to resourcing of the Croda China team, and delivered a major upgrade to our digital presence, including a locally hosted China website. We are also introducing our successful French botanical ingredients business to the China market, where consumers have long been focused on plant-based beauty and health products.

Drug delivery offers our strongest global opportunity for growth and we are investing in new manufacturing capacity to serve these patient health care markets. We are currently commissioning a doubling of our US speciality excipient plant, serving a market growing by double-digit percentage annually. We also reprioritised £10m of investment in 2020 to support the Pfizer contract and other opportunities from our Avanti acquisition. Much of this capacity will come on stream this year to serve growth in 2021 and beyond.

We have supported this organic investment with our two key acquisitions in 2020; Avanti, for an initial consideration of US$185m, and Iberchem, for a total consideration of €820m. Supporting acquisition debt financing, Iberchem was part-funded by an equity placing, which raised gross proceeds of £627m and was well supported by existing institutional shareholders which represented 75% of the placing. Our employees and private shareholders also participated through the PrimaryBid platform.

Net debt closed the year just above £800m, with a leverage ratio of 1.8 times EBITDA. Coupled with resilient earnings in 2020 and the prudent leverage and dividend policies we have adopted for many years, we have weathered the truly challenging conditions of 2020 and the Board has proposed an increase in the full year ordinary dividend to 91.0p (2019: 90.0p).

Another record year for Life Sciences; challenges for Personal Care and Performance Technologies

The standout performance in 2020 was again in Life Sciences, with record sales and profit, driven by a strong performance in both Health Care and Seed Enhancement. With no discernible negative impact from COVID-19, sales grew by nearly 15% to £401.6m (2019: £350.5m) and adjusted operating profit increased over 20% to £129.4m (2019: £107.1m), both in reported currency. With continued growth in higher value-added niches, return on sales increased by 160 basis points to 32.2% (2019: 30.6%), in line with our strategy. In Health Care, continued growth in speciality excipients and vaccine adjuvants was complemented by the acquisition of Avanti, with its pipeline of development and synergistic scale-up opportunities, beginning with our contract to supply vaccine delivery components for COVID-19.

Crop Protection continued to grow sales, excluding the impact of planned product withdrawals, and Seed Enhancement returned to double-digit revenue growth. Life Sciences is now well established as a fast growth, high-value business in Croda's model.

Personal Care was significantly affected by lockdowns in response to COVID-19. This negatively impacted sales by reducing consumer demand for products associated with 'going out' and by interrupting sales channels, particularly for prestige products. Sales were 1.9% lower at £475.9m (2019: £485.2m) and 6% lower in underlying terms pre-Iberchem. However, from a low point in May, sales recovered month-on-month and were in line with prior year in the fourth quarter. With a higher proportion of sales of 'at home' use Beauty Formulation products and a greater sales reduction in the higher margin Beauty Actives and Beauty Effects businesses, the adverse mix saw adjusted operating profit reduced to £136.5m (2019: £162.1m) and return on sales of 28.7% (2019: 33.4%). We expect sales and profit to improve when lockdowns lift, luxury channels re-open and with the significant cross-selling opportunities provided by the Iberchem acquisition.

In Performance Technologies, sales were only 3% lower than prior year at £416.4m (2019: £430.2m) in challenging industrial markets globally but profitability reduced significantly. After a good start to the year, sales progressively weakened during the second quarter alongside temporary closures of automotive and industrial plants. The second half saw a steady recovery, with fourth quarter sales encouragingly ahead of prior year. However, adjusted operating profit reduced by over 20% to £54.0m (2019: £69.4m) and return on sales was 13.0% (2019: 16.1%), due to the sector's higher operating leverage, lower production at European sites and adverse profit mix, as volume was more resilient in lower margin parts of the business. With a recovery accompanied by growth in renewable technologies and sustainable solutions, the sector should become less cyclical as sales growth and better margin return.

Regional growth in North America offset by slower Europe and Asia markets

Sales in all regions were impacted in the second quarter by governments' initial COVID-19 responses. North America and Latin America returned to underlying sales growth in the second half of 2020, with North America also achieving growth across 2020 as a whole. Lockdowns were more extensive and impactful in Asia and Europe but both regions achieved flat underlying sales in the second half year, compared to 2019. In Asia, China growth rebounded quickly but the key manufacturing markets of Japan and Korea remained soft due to the reduction in foreign tourists.

The North American biosurfactant plant came online early in 2020. Following a successful commissioning phase, the plant produced the majority of our US feedstock demand, allowing replacement of traditional petrochemical surfactants with our ECO range of bio-based products, which deliver identical performance from sustainable ingredients for the first time. COVID-19 has adversely impacted short-term economics, with sanitiser-grade bioethanol in short supply, resulting in a high raw material price. In addition, the plant was unable to operate from September 2020 after the local regulator raised a number of deficiencies with regard to air permit limits, which have tightened over the last few years in line with lower emissions at the site. As a result, the operating loss on the plant increased by £7m on 2019. We expect the plant to be operational again during the first half of 2021, allowing progressive development of the sustainable product pipeline, a move to a cheaper feedstock and a steady improvement in profitability.

Our Purpose

At Croda, we believe that delivering a strong financial performance is only a part of having a clear, shared purpose; shared with our employees, our customers and all our stakeholders. Our Purpose builds deeper connections throughout the business and improves our competitiveness, driving the long-term success of our Company. Our Purpose is to use Smart science to improve lives™ and to deliver this we combine our knowledge, passion and entrepreneurial spirit to create, make and sell speciality ingredients that are relied upon by industries and consumers everywhere.

Croda was built on a foundation of using smart science to turn renewable raw materials into innovative ingredients. This sustainability focus still sits at the core of what we do, driving innovation to create market-leading products and ensuring that we have a positive effect on the environment and society. By aligning our smart science with the United Nations Sustainable Development Goals (SDGs), our sustainability Commitment is to be Climate, Land and People Positive by 2030. The impact that Croda has in these three key areas of sustainability will be net positive for the planet. Our commitment is to become the most sustainable supplier of innovative ingredients. It is the right thing to do, but it is also what our customers want and what their consumers are increasingly demanding. COVID-19 may have been the challenge of 2020 but creating a sustainable future remains our biggest long-term challenge.

In 2020, we have continued to drive our sustainability agenda, establishing interim goals against which we measure our progress towards achieving our Commitment. We have developed decarbonisation roadmaps for our top ten carbon-emitting sites. In recognition of Croda's leading position, we were awarded a 'Triple A' ESG rating by stock market agency, MSCI. We were again recognised as one of Britain's top five 'Most Admired Companies' and the most admired British chemical company by Management Today. Since 2015, we have driven a 34% reduction in waste-to-landfill, a 16% reduction in our Green House Gas emissions, and a 25% improvement in our energy mix. We sustained our process safety performance in 2020, with no serious incidents or any with major accident potential. Personal injury performance also continued to improve, ahead of our target of 0.6 per 200,000 hours, with a Total Recordable Injury Rate (TRIR) of 0.54 (excluding recent acquisitions and COVID-19 cases).

Our bio-based raw material content is now 67% (2019: 63%). Leveraging our position in renewable raw materials, Croda enables our customers to meet their sustainability commitments, driven by consumer demand as well as regulatory change. In consumer care markets, we deliver this through ethical sourcing, sustainable manufacture, focusing more of our innovation on sustainable ingredients and through our ingredient transparency project. This project is responding to growing consumer demand for sustainable ingredients and the 'clean beauty' trend, where consumers want to know what is in the products they use, as well as how well they perform. Our ECO biosurfactant plant enables us to produce sustainable ingredients that deliver identical performance to their petrochemical peers, with customers in both the home care and personal care markets adopting these bio-based surfactants during 2020.

A purpose-led consumer-facing ingredients company

Our overall strategy continues to be to drive:

- Growth – consistent top and bottom line growth, with profit growing ahead of sales, ahead of volume;
- Innovation – the lifeblood of our business, we seek to increase the proportion of New and Protected Products (NPP) that we sell and formulate into customers' products; and
- Sustainability – aligning our business with our Purpose and accelerating our customers' transition to sustainable ingredients.

Our strategies for each sector are described below.

- **Expand to Grow Life Sciences**. With its growing margin and exciting technologies aligned to global health and crop sustainability trends, we continue to build our Life Sciences brand as a high value-add solution provider to our pharmaceutical and crop customers. We are deploying more capital in this sector, having accelerated investment in Life Sciences with organic expansion of our speciality excipients business and the acquisition of adjacent technologies to build a broad drug delivery business of global scale. Through the acquisition of Avanti, we added proprietary lipid technology to Croda's capabilities in drug delivery systems. Alongside urgent demand to respond to the COVID-19 pandemic, this unlocks a major pipeline of other opportunities, including mRNA and gene therapy drug and vaccine technologies. To rapidly develop this, 2021 will see us invest a further £40m to expand the Avanti and UK scale-up facilities. Alongside improving sales from our recent vaccine adjuvant acquisition, Biosector, and strong R&D relationships in Crop Care, we expect to deliver mid to high single-digit percentage sales growth at increased margins over the medium term.
- **Strengthen to Grow Consumer Care**. Already recognised as the leading market innovator, we will strengthen growth in our Personal Care business. With the acquisition of Iberchem, together with unlocking the high-growth potential of our Home Care business in hygiene and fabric applications, 2021 will see these three legs consolidated into a Consumer Care sector. This combination will enable the cross-selling of our industry-leading Beauty Actives, Beauty Effects and heritage Beauty Formulation high performance ingredients with Iberchem's on-trend fragrances to both sets of customers. Iberchem expands Croda's access into emerging markets, while Croda provides Iberchem access to much of Europe and North America for the first time. We will be able to offer improved, stable formulations containing fragrance and a greater range of sustainable solutions, including our ECO range of biosurfactants across Beauty Formulation and Home Care. Consumer Care offers the opportunity to selectively deploy more capital, through organic growth, geographic expansion and bolt-on acquisition. With a recovery in prestige consumer markets when lockdowns are lifted, Iberchem's consistent record of growth and new revenue synergies, we expect over the medium term to achieve mid single-digit percentage top-line growth and high margins that reflect the blend of the three businesses.

- **Refine to Grow Performance Technologies**. We are refining Performance Technologies to focus on high-tech markets and reduce exposure to cyclical business. 2020 saw progress in meeting demands for sustainable solutions in advanced technologies, focusing on fast-growth markets in circular plastics, electric vehicles and other renewable technologies, such as wind turbines, and a continued reduction in oil and gas and some traditional automotive applications. We are also expanding our geographic footprint, creating a new innovation centre to drive our China growth, in the world's biggest and fastest-growing industrial market. We expect to progressively reduce the cyclical nature of this business, with sales growth targeting global GDP and steady margin improvement towards our 20% target over the medium term.

Alongside our three sector strategies, we are pursuing key strategic targets across Croda, to deliver fast growth in China, through increased investment in sales, innovation and manufacturing, as set out above; scaling our biotechnology investment to drive disruptive technologies and greater sustainability; increasing the robustness of our global supply chain to meet customers' future needs; and developing the Croda brand as an employer of choice to continue to recruit and retain the best entrepreneurs and innovators.

We are also building our digital capability to continue to improve customer intimacy and experience, while improving process efficiency. Our digital transformation programme extends across our Create, Make and Sell model. In Create, we are investing in knowledge management, to further leverage our global innovation expertise. In Make, we have introduced real-time monitoring of production plant performance and are rolling out a supply chain programme which will improve stock availability local to the customer while reducing working capital. In Sell, with few in-person customer visits possible during lockdown, we prioritised the use of digital for customer engagement and rolled out our Live Chat functionality in 35 countries. This resulted in a third more website visitors and leads generated from digital channels, compared to 2019.

Accelerating strategic delivery through acquisition

We are also continuing to pro-actively search for M&A opportunities to accelerate our strategic delivery in the life science and consumer markets. 2020 saw two key milestones in delivering this programme. In August, we completed the acquisition of Avanti, a US-headquartered business which makes lipid-based delivery systems for drugs and vaccines. The latest technology, lipid nanoparticle (LNP) systems, are increasingly attractive for the delivery of complex therapeutic drugs and in next-generation mRNA vaccines. The acquisition combined Avanti's leading position in early-stage pharma research with Croda's manufacturing scale-up expertise. Previously, Avanti's scale had not been able to take clinical trial quantities of successful drug systems into commercial manufacture. Despite this, Avanti delivered double-digit percentage CAGR sales growth between 2016 and 2019, and the synergistic combination of Avanti and Croda should unlock this growth considerably. The acquisition also more than doubled our Health Care R&D capability, with 100 scientists joining with Avanti.

During 2020, Avanti saw a dramatic increase in its project pipeline, driven by potential COVID-19 treatments; in one of these projects, pre-acquisition, Avanti and Croda worked together to develop and scale-up an LNP delivery system for a vaccine candidate. This development work led to a five-year non-exclusive contract to supply lipid components into the Pfizer-BioNTech COVID-19 vaccine, which we initially estimated would generate approximately US$100m of sales in 2021 if the customers' publicly indicated volumes were required. Based on contractual commitments received to date, we now expect a minimum of US$125m sales in 2021 for this vaccine. While this was a proud moment for all at Croda, the vaccine marks an early use of innovative mRNA technology which is expected to drive future excipient growth well beyond COVID-19 in the prevention of other infectious diseases and treatments, including cancer. The acquisition also cements the position of Health Care and the wider Life Sciences business as a high growth, high-value part of Croda's future success.

The second milestone was achieved in November, when we completed the acquisition of Iberchem, a global fragrance and flavour business. Strategically, Iberchem further increases our exposure to faster growing consumer care markets and geographies, with Iberchem having grown at 14% sales CAGR between 2016 and 2020. With a highly commercial approach to R&D and its focus on delivering tailor-made products at speed, Iberchem is strong in customer niches such as own-brand, regional and independent brands, a customer profile that is similar to much of Croda's own Personal Care business. It also has over 80% of its sales in high-growth emerging markets, a combination with Croda which creates significant cross-selling opportunities which are expected to generate nearly €50m of annualised revenue synergies within five years. With our leading position in sustainability, we are also well placed to help transition Iberchem's raw material profile onto a more sustainable platform, a potential differentiator in the market.

Outlook

While continued COVID-19 restrictions make the near-term outlook for elements of our Consumer Care and Performance Technologies sectors difficult to predict, 2020 sales exit rates were encouraging with consumer and industrial end markets showing signs of recovery. Life Sciences is expected to remain strong. The benefits of recovery, together with the full year impact of Avanti, Iberchem and our Pfizer-BioNTech COVID-19 vaccine contract, are expected to support profitable growth across the business.

Through our Purpose, Smart science to improve lives™, we will continue to increase the positive impact our products deliver for our customers and their consumers, whilst also reducing the negative impact our activities have on our fragile world. The combination of our differentiated business model, healthy innovation pipeline and recent investments is expected to underpin performance and generate value for all our stakeholders.

Finance Review

Strong cash generation and funding capacity supporting continued investment

The resilience and cash-generative nature of our business model was demonstrated in 2020, despite the impact of the COVID-19 pandemic on market demand. With only a limited reduction in profit, Croda continued to invest in future growth, through both organic expansion and acquisition, whilst continuing to increase its dividend.

Currency

The average sterling exchange rates across the Group's key currencies in 2020 were broadly unchanged at US$1.285 (2019: US$1.278) and €1.125 (2019: €1.141), resulting in limited impact of currency translation on reported sales and operating profit.

Sales

Sales in reported currency increased by 0.9% to £1,390.3m (2019: £1,377.7m). Constant currency sales increased by 1.1%. Underlying sales declined by 2.7%, more than offset by acquisition sales adding £51.8m.

Sales	£m	%
2019 reported	1,377.7	
Underlying growth/(decline)	(37.3)	(2.7)
Impact of acquisitions	51.8	3.8
2020 constant currency	1,392.2	1.1
Impact of currency translation	(1.9)	(0.2)
2020 reported	1,390.3	0.9

In the Core Business, constant currency sales increased by 2.3%. Sales volume increased by 1.2%, driven by growth in Life Sciences. Price/mix was 3.0% lower, reflecting adverse mix in Personal Care and Performance Technologies in challenging market conditions. Acquisitions added 4.1% to Core Business sales growth.

	2020 reported currency			2019
Sales	**£m**	Year on year change	Constant currency change	£m
Personal Care	475.9	(1.9)%	(1.8)%	485.2
Life Sciences	401.6	14.6%	14.8%	350.5
Performance Technologies	416.4	(3.2)%	(3.2)%	430.2
Core Business	1,293.9	2.2%	2.3%	1,265.9
Industrial Chemicals	96.4	(13.8)%	(13.4)%	111.8
Group	1,390.3	0.9%	1.1%	1,377.7

Constant currency sales in Life Sciences grew by nearly 15%, with a positive impact on demand in Health Care from COVID-19, supported by the Avanti acquisition in August. Personal Care sales were 2% lower, due to the impact of COVID-19 lockdowns on consumer demand, and Performance Technologies fell by 3%, particularly reflecting weakness in global automotive demand. Overall, the second half year was notably stronger than the first, as markets recovered and with the benefit of acquisitions. In particular, the fourth quarter saw underlying Personal Care sales restored to the prior year level, a return to sales growth in Performance Technologies and continued strong demand in Life Sciences.

2020 sales at constant currency	First Half %	Second Half %	Full Year %
Personal Care	(9.5)	6.2	(1.8)
Life Sciences	(1.7)	33.2	14.8
Performance Technologies	(5.6)	(0.6)	(3.2)
Core Business	(6.0)	11.3	2.3
Industrial Chemicals	(17.8)	(8.9)	(13.4)
Group	(6.9)	9.6	1.1

Adjusted profit

Adjusted operating profit decreased by 5.9% in reported currency to £319.6m (2019: £339.7m). Operating costs benefited from cost savings delivered at the end of 2019, lower discretionary spend in 2020 (for example, on travel and exhibitions) and no bonus charge. These savings were offset by the impact of acquisitions and a higher share-based payments charge, reflecting the strong share price performance and high levels of employee share plan participation. The loss from the ECO biosurfactants plant in North America increased by £7m to £11m, due to higher feedstock prices, caused by COVID-19 demand for sanitiser-grade bioethanol, and the plant only operating for part of the period whilst carrying a full cost base.

The classification of cost of sales and administrative expenses within the Income Statement has been revised to align 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.

Income statement	**2020 £m**	2019 restated £m
Revenue	1,390.3	1,377.7
Cost of sales	(758.2)	(746.5)
Gross profit	632.1	631.2
Adjusted operating costs	(312.5)	(291.5)
Adjusted operating profit	319.6	339.7
Net interest charge	(19.0)	(17.6)
Adjusted profit before tax	300.6	322.1

On a constant currency basis, adjusted operating profit fell by 4.0%. This reflected the impact of the decline in underlying sales, together with an adverse impact from the lower price/mix, partly offset by £12.3m of incremental profit from in-year acquisitions. As a result, return on sales declined to 23.0% (2019: 24.7%).

Adjusted operating profit	£m	%
2019 reported	339.7	
Underlying growth	(26.0)	(7.7)
Impact of acquisitions	12.3	3.7
2020 constant currency	326.0	(4.0)
Impact of currency translation	(6.4)	(1.9)
2020 reported	319.6	(5.9)

Constant currency operating profit in Life Sciences increased by over £27m, reflecting revenue growth and an increase in high value-add Health Care sales. By contrast, profit fell in Personal Care and Performance Technologies, the former due to lower sales and adverse mix, as Beauty Formulation's 'at home' use products held up better during the pandemic than the higher value-add Beauty Actives and Effects businesses, and the latter due to lower sales, adverse mix and higher operating leverage.

Adjusted operating profit	**2020 Reported £m**	**2020 Constant currency £m**	2019 Reported £m
Personal Care	136.5	137.3	162.1
Life Sciences	129.4	134.3	107.1
Performance Technologies	54.0	54.6	69.4
Core Business	319.9	326.2	338.6
Industrial Chemicals	(0.3)	(0.2)	1.1
Group	319.6	326.0	339.7

In reported currency, the net interest charge increased to £19.0m (2019: £17.6m), reflecting higher net debt following the Avanti and Iberchem acquisitions. Adjusted profit before tax reduced to £300.6m (2019: £322.1m), a creditable performance in the challenging conditions created by the COVID-19 pandemic.

The effective tax rate reduced to 24.1% (2019: 25.6%). There were no significant adjustments between the Group's expected and reported tax charge based on its accounting profit. Adjusted profit after tax in reported currency was £228.2m (2019: £239.7m). Adjusted basic earnings per share (EPS) were 175.5p (2019: 185.0p), reflecting the lower profit and the share issuance for the Iberchem acquisition in November.

IFRS profit

IFRS profit is measured after exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition, whereas the adjusted results are presented excluding these items. The charge for these adjusting items before tax was £31.1m (2019: £19.8m). Acquisition costs were significantly higher in 2020 at £11.7m (2019: £0.3m), reflecting the activity in the year. The charge for amortisation of intangible assets was £13.6m (2019: £8.8m), with the increase reflecting recent acquisitions. The charge for exceptional items was £5.8m (2019: £10.7m), reflecting the delivery of the cost-saving actions announced in the 2019 full year results and a discount unwind in contingent consideration. These have been presented as exceptional by virtue of their nature and for consistency across reporting periods. Profit before tax on an IFRS basis was £269.5m (2019: £302.3m), the profit after tax on an IFRS basis was £201.6m (2019: £223.8m) and basic EPS were 155.1p (2019: 172.8p).

Income statement	**2020 £m**	2019 £m
Adjusted profit before tax	300.6	322.1
Exceptional items, acquisition costs & intangibles	(31.1)	(19.8)
Profit before tax (IFRS)	269.5	302.3
Tax	(67.9)	(78.5)
Profit after tax (IFRS)	201.6	223.8

From Personal Care to Consumer Care

As set out in the Chief Executive's Review, from 2021 the Group will report under four sectors – Consumer Care, Life Sciences, Performance Technologies and Industrial Chemicals. Consumer Care will comprise the Personal Care sector, including Iberchem and a customer currently reported within Life Sciences, and the Home Care business unit from Performance Technologies. In the 2021 accounts, the 2020 results will be restated for these changes. The table below sets out the new structure, showing both the actual 2020 result and the 2020 outcome had Iberchem and Avanti been owned for the full year ('pro-forma'). It does not include changes in allocation of central and indirect costs.

	Sales			**Adjusted operating profit**		
2020 reported currency	**As reported £m**	**New structure £m**	**Pro-forma** £m	**As reported £m**	**New structure £m**	**Pro-forma £m**
Consumer Care	475.9	527.8	666.6	136.5	146.5	171.0
Life Sciences	401.6	392.5	410.5	129.4	124.5	127.5
Performance Technologies	416.4	373.6	373.6	54.0	48.9	48.9
Core Business	1,293.9	1,293.9	1,450.7	319.9	319.9	347.4
Industrial Chemicals	96.4	96.4	96.4	(0.3)	(0.3)	(0.3)
Group	1,390.3	1,390.3	1,547.1	319.6	319.6	347.1

Capital allocation and cash management

The Group's capital allocation policy remains to:

1. **Reinvest for growth** – invest in organic capital expenditure to drive shareholder value creation through new capacity, product innovation and expansion in attractive geographic markets to drive sales and profit growth;
2. **Provide regular returns to shareholders** – pay a regular dividend to shareholders, representing 40 to 50% of adjusted earnings over the business cycle;
3. **Acquire disruptive technologies** – to supplement organic growth, continue to target a number of exciting technology acquisitions in existing and adjacent markets, with a focus on our Consumer and Life Sciences businesses; and
4. **Maintain an appropriate balance sheet and return excess capital** – maintaining an appropriate balance sheet to meet future investment and trading requirements, we are targeting a leverage ratio of 1 to 2x over the medium-term cycle. We consider returning excess capital to shareholders when leverage falls below our target range and sufficient capital is available to meet our investment opportunities, and last returned over £150m through a special dividend in 2019.

In 2020, at a time when other companies were cutting back investment, Croda continued to execute this policy. We invested in future organic growth, with net capital expenditure accelerating to £121.0m (2019: £106.8m), targeting our strategic delivery areas. We have expanded Life Sciences, investing to scale drug delivery, doubling our US speciality excipient capacity and expanding in Japan, while reprioritising £10m in 2020 to deliver COVID-19 solutions for our customers. We have invested to fast-grow in Asia with new labs and digital presence, expanded capacity in Smart Materials in Performance Technologies and invested to grow our sustainable product offerings.

Croda has operated for many years with a prudent leverage and dividend distribution policy. This enabled the Board, after careful consideration of all stakeholders and treating all groups consistently and fairly, to pay the final 2019 ordinary dividend of 50.5 pence per share (£65.0m) in May 2020. In addition, given the resilience of the business model during the COVID-19 pandemic, Croda maintained the interim dividend of 39.5p (2019: 39.5p), paid in October 2020. Given 2020 earnings performance, limited leverage and balance sheet strength, the Board is recommending a full year ordinary dividend of 91.0p (2019: 90.0p). This is a 1.1% increase on the prior year, a 10.5% increase in cash cost and represents 52% of adjusted EPS, with the ratio expected to come within the policy range over the medium term.

2020 saw significant allocation of capital to acquisitions. Building on our leading position in Health Care, in August we completed the acquisition of Avanti Polar Lipids, LLC for an initial consideration of US$185m and a potential earn-out of up to a further US$75m. This acquisition was funded from a US$200m unsecured, committed three-year term loan, with financial covenant requirements consistent with the Group's facilities. Combined with Avanti's cash generation, the acquisition had a limited impact on Croda's leverage and liquidity. Consumer Care is also a priority for capital allocation and in November we acquired Iberchem for a total consideration of €820m. The acquisition was funded by a combination of the Group's existing debt facilities and an equity placing which raised net proceeds of £615m. Return on invested capital (ROIC) reduced to 14.6% (2019: 17.0%), primarily due to the significant allocation of capital to acquisitions during the year. The Economic Value Added (EVA) underpin to Croda's Remuneration Policy reinforces the importance of delivering superior ROIC which is expected to improve as the profit benefits of recent acquisitions develop.

With working capital broadly flat in the year, free cash flow remained robust at £176.9m (2019: £201.7m).

Cash flow	**2020 £m**	2019 £m
Adjusted operating profit	319.6	339.7
Depreciation and amortisation	68.2	57.6
EBITDA	387.8	397.3
Working capital	(2.3)	1.6
Net capital expenditure	(121.0)	(106.8)
Payment of lease liabilities	(7.6)	(8.8)
Non-cash pension expense	7.7	2.8
Interest & tax	(87.7)	(84.4)
Free cash flow	176.9	201.7
Dividends	(115.9)	(266.9)
Issue of new equity	615.5	–
Acquisitions	(869.7)	(5.0)
Other cash movements including acquisition costs	(26.6)	(17.9)
Net cash flow	(219.8)	(88.1)
Net movement in borrowings	237.3	115.4
Net movement in cash and cash equivalents	17.5	27.3

Net debt and liquidity

After currency translation, net debt increased to £800.5m (31 December 2019: £547.7m). The Group has a strong balance sheet, having completed its debt refinancing in 2019, with no material debt maturities falling due before 2023. Aligned with Croda's commitment to be Climate Positive by 2030, our 'green' banking facility requires Croda to reduce its carbon use every year by a specified amount to receive the most favourable rate of interest. As at 31 December 2020, the Group had committed funding in place of £1,244.3m, with undrawn long-term committed facilities (net of overdrafts) of £378.3m and £106.5m in cash. As a result, the leverage ratio was 1.8x (31 December 2019: 1.4x), well within a covenant maximum of 3.5x, measured semi-annually.

In the first half year, we reviewed the liquidity and covenant forecasts for the Group for the potential impact of COVID-19 on trading activities. We also considered sensitivities in respect of potential downside scenarios and the mitigating actions available, relative to a base case scenario. The downside scenarios assumed a significant reduction in demand, a material increase in working capital and substantial margin erosion. The evaluation showed that, even in the most pessimistic downside scenario, the Group would continue to have robust liquidity and financial covenant headroom. In the event, the full year result was ahead of the base case scenario. Following the year end, we have repeated the scenario planning and confirmed that the Group is expected to continue to maintain robust liquidity and ample headroom.

Brexit update

Through the implementation of detailed contingency plans, we saw minimal operational impact from the UK's withdrawal from the European Union (EU) at the end of 2020. We initiated changes to our European trading model, temporarily increased inventory levels to mitigate any risks of delays at borders and ensured that customer service was maintained. We continue to monitor the post-Brexit situation, particularly with regard to cross-border shipping and the proposed UK chemicals regulatory regime.

Retirement benefits

The post-tax deficit on retirement benefit plans at 31 December 2020 on an accounting valuation basis under IAS19 reduced to £25.3m (2019: £60.1m). Cash funding of the various plans is driven by the schemes' ongoing actuarial valuations. While the triennial actuarial valuation as of 30 September 2020 for the largest pension plan, the UK Croda Pension Scheme, is not yet complete, the scheme is expected to be fully funded on a Technical Provisions basis with no deficit contribution required.

Alternative performance measures

We use a number of alternative performance measures to assist in presenting information in this statement in an easily analysable and comprehensible form. We use such measures consistently at the half year and full year and reconcile them as appropriate. The measures used in this statement include:

- *Constant currency results:* these reflect current year performance for existing business translated at the prior year's average exchange rates and include the impact of acquisitions. For constant currency profit, translation is performed using the entity reporting currency. For constant currency sales, local currency sales are translated into the most relevant functional currency of the destination country of sale (for example, sales in Latin America are primarily made in US dollars, which is therefore used as the functional currency). Sales in functional currency are then translated into Sterling using the prior year's average rates for the corresponding period. Constant currency results are reconciled to reported results in this Finance Review;
- *Underlying sales and operating profit:* these reflect constant currency values adjusted to exclude the impact of acquisitions. They are reconciled to reported results in this Finance Review;
- *Adjusted results:* these are stated before exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition, and tax thereon. The Board believes that the adjusted presentation (and the columnar format adopted for the Group income statement) assists shareholders by providing a meaningful basis upon which to analyse underlying business performance and make year-on-year comparisons. The same measures are used by management for planning, budgeting and reporting purposes and for the internal assessment of operating performance across the Group. The adjusted presentation is adopted on a consistent basis for each half year and full year results;
- *Core Business:* this comprises Personal Care, Life Sciences and Performance Technologies;
- *Return on sales:* this is adjusted operating profit divided by sales, at reported currency;
- *Net debt:* comprises cash and cash equivalents (including bank overdrafts), current and non-current borrowings and lease liabilities;
- *Leverage ratio:* this is the ratio of net debt to Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) adjusted to include EBITDA from acquisitions in the last 12-month period. EBITDA is adjusted operating profit plus depreciation and amortisation; and
- *Free cash flow:* comprises EBITDA less movements in working capital, net capital expenditure, payment of lease liabilities, non-cash pension expense, and interest and tax payments.

Sector Performance Review

Second half sales recovery in Personal Care but profit mix impacted by consumer lockdowns

The performance of the Personal Care sector was significantly affected by lockdowns initiated in response to COVID-19. This negatively impacted sales by reducing consumer demand for products associated with 'going out' and by interrupting sales channels, particularly for prestige products. In this environment, consumer products sold in supermarkets or online performed best. For Croda, this mix change had a negative impact on the return on sales, with a higher proportion of sales of 'at home' use Beauty Formulation products and a greater sales reduction in the higher-margin Beauty Actives and Beauty Effects businesses.

In Asia, China rebounded quickly during the first half of the year, but sales remained subdued in the key regional manufacturing markets of Japan and South Korea due to less tourism, as well as in South Asia which experienced extended periods of lockdown. Europe was also negatively impacted by lockdowns, with the near-closure of the French cosmetic industry and luxury shopping channels for several weeks during the second quarter. By contrast, sales in North America remained robust throughout the year and Latin America also improved in the second half year.

Sales declined by 1.8% and adjusted operating profit by 15.3%, both in constant currency. The profit reduction reflected a sales price/mix decline of 5%, reflecting the weaker business mix, while volume was just 1% lower and acquisitions added 4%. In reported currency, sales were 1.9% lower at £475.9m (2019: £485.2m) and adjusted operating profit was £136.5m (2019: £162.1m). Return on sales reduced to 28.7% (2019: 33.4%). This lower profitability reflected the adverse mix effect, an increased share of the ECO plant loss and the diluting effect of the Iberchem acquisition. IFRS operating profit was £123.0m (2019: £158.2m).

Excluding the Iberchem acquisition, underlying sales in Personal Care were 6% lower than prior year. Sales in Beauty Formulation, with its portfolio of heritage ingredients, declined by less than 5%. Sales in Beauty Actives and Beauty Effects were each down by around 10%, with Beauty Effects impacted through its exposure to social and travel categories, such as sun protection and colour cosmetics, and Beauty Actives by the disruption to consumer distribution channels for prestige products, particularly in France and North Asia, where consumer brands were more impacted by store closures, having less well developed on-line presence.

Our performance since lockdowns began has been consistent with broader published consumer sales data for Personal Care and Beauty, which reported declines of 3% in the US and 8% in Europe. During the year, our sales reached a low in May, down almost 20% on the prior year, but then enjoyed month-on-month recovery, with underlying fourth quarter sales encouragingly returning to prior year levels and a relative improvement in Beauty Actives and Beauty Effects.

The drivers behind Personal Care's 'Strengthen to Grow' strategy remain unchanged – the continued rise in disposable income especially in emerging markets, coupled with a desire for improved wellbeing, an ageing population, greater use of digitalisation, continued market fragmentation amongst our customers and accelerating demand for sustainable consumer products. As the leading innovator in our sector, we are well placed to capitalise on these trends through our presence in every major market, strong innovation pipeline and sector-leading margin.

In Personal Care our strategy is to:

- Continue to scale our industry-leading Beauty Actives business which creates our most valuable claims-based skincare ingredients. Beauty Actives has continued its industry-leading innovation, expanding in biotechnology to create greener active ingredients. 2020 saw the launch of Synchrolife™ from Sederma, which counteracts the harmful effects of digital pollution, the development of Silverfree™, a biologically active ingredient to combat the greying of hair, and expansion of botanical ingredients from Crodarom. With its sales more weighted towards 'masstige' markets and toiletries, Crodarom continued to grow in 2020 and we are developing growth plans for Asia and market adjacencies. We have recently agreed to acquire botanicals specialist Alban Muller to expand our portfolio of natural active ingredients, for a total consideration of €25m;
- Broaden the product portfolio in Beauty Effects, which offers similar growth and innovation potential to Beauty Actives, through organic innovation and partnerships. Despite its exposure to 'going out' products, Beauty Effects delivered new product launches in 2020, increasing NPP to 80% of sales and meeting consumers' sustainability and lifestyle needs. New products included Keramatch™ V, a vegan alternative to keratin to improve damaged hair; and
- Continue to reinvent Beauty Formulation, through greater product differentiation and unmatched formulation expertise for our customers. 2020 saw our first waterless formulations and new opportunities for our ECO range of bio-based ingredients.

As we broaden our Consumer Care strategy, we are targeting enhanced top-line growth through:

- The acquisition of Iberchem, a strong regional player in mid-sized and smaller customers. This accesses a new high-growth adjacency and creates a 'one-stop-shop' for those customers, combining Croda's critical ingredients with Iberchem's on-trend fragrances in stable formulations. With over 50% of its sales in Africa and Asia, including 25% in China, Iberchem has a strong emerging market presence, providing significant opportunities for revenue synergies as we leverage the respective Croda and Iberchem customer networks. We will further differentiate Iberchem's position by driving a transition to more sustainable fragrance materials; and
- The integration of Croda's Home Care business, which is expected to continue to grow from a strong 2020 performance, driven by greater hygiene demand, our ECO household cleaners, and our innovative fabric conditioner protein technology. This won a 'Brilliance' award from Unilever as part of its Clean Future programme to replace fossil-based ingredients in its home care products.

This strategy is supported by a robust innovation pipeline. NPP products represented 41% (2019: 43%) of 2020 sector sales, the slight decline reflecting the business mix impact. To respond to growing consumer demand for sustainable ingredients and the 'clean beauty' trend, where consumers want to know what is in the products they use, as well as how well they perform, we are developing our ingredient transparency platform and helping our customers deliver their sustainability objectives. Croda's R&D investment and capital investment have established our leadership in helping customers move away from traditional petrochemical ingredients. This is complemented by 36 Open Innovation projects with partners; these include natural cellulose powders for skin texture application produced from sustainably harvested pulp, and first sales of innovative metal oxides for sun protection.

We are also investing in digital to meet customer needs more quickly and effectively. 2020 saw a focus on customer webinars, roll out of Live Chat globally and the launch of a locally hosted and designed website for Chinese customers resulting in a 350% increase in website traffic in China.

Record performance in Life Sciences driven by move to patient health care

2020 marked another record year for sales and profit in Life Sciences, with COVID-19 creating new Health Care opportunities as the year developed. In Health Care, continued growth in speciality excipients and vaccine adjuvants was complemented by the acquisition of Avanti Polar Lipids, LLC and a contract to supply Pfizer with components for their COVID-19 vaccine. Crop Protection continued to grow sales, net of planned product withdrawals, and Seed Enhancement delivered double-digit revenue growth. Life Sciences is now well established as a fast-growth, high-value leg of Croda's business model.

Sales increased by 14.8% and adjusted operating profit grew by 25.4%, in constant currency. This was driven by volume growth of 7% and unchanged price/mix, whilst acquisition added 8%. In reported currency, sales were up 14.6% at £401.6m (2019: £350.5m), with adjusted operating profit 20.8% higher at £129.4m (2019: £107.1m). Return on sales strengthened to 32.2% (2019: 30.6%), reflecting the sector's continued migration to higher value-add technologies. IFRS operating profit was £117.2m (2019: £97.7m).

The Health Care business saw constant currency sales increase by almost 30%, with an expanded number of technology platforms in drug and vaccine delivery systems. Speciality excipients again delivered strong sales growth, driven by the expansion in parenteral drugs using biologic actives, with their complex stabilisation needs. We continued to build on our leading position in this niche market by launching new excipients, expanding our sales and technical capability globally, and through organic investment to double manufacturing capacity in the US. Following the acquisition of Biosector in 2018, we are also a leading supplier of vaccine adjuvants which help trigger the body's immune response to vaccines. Our vaccine adjuvant business delivered strong sales and profit growth in 2020, benefiting from synergies with the Croda selling network.

In August we completed the acquisition of Avanti for an initial consideration of US$185m. Avanti adds a new drug and vaccine delivery technology through its industry leadership in lipid-based systems. In addition to an established business supporting pharmaceutical drug development, Avanti's lipid nanoparticle (LNP) system is increasingly attractive for use in complex therapeutic drugs and next-generation mRNA vaccines, expected to become a fast-growing part of the market. The acquisition combines Avanti's leading position in early-stage pharmaceutical research with Croda's expertise in commercial scale-up, a market in which Avanti could not previously participate.

Avanti had already been working on COVID-19 vaccine development at the time of acquisition, with Croda working as its scale-up partner. We redirected significant resource away from other projects to focus on supporting this vital global need. This development work led to a five-year non-exclusive contract to supply lipid components into the Pfizer-BioNTech COVID-19 vaccine, which we initially estimated would generate approximately US$100m of sales in 2021 if the customers' publicly indicated volumes were required. Based on contractual commitments received to date, we now expect a minimum of US$125m sales in 2021 for this vaccine. Croda is also supporting over 60 other COVID-19 vaccine and therapeutic drug development projects.

Crop Protection revenue was broadly flat, despite the headwind from our voluntary withdrawal from products with a negative environmental footprint. After a weaker first half year, sales recovered in the second half, reflecting phasing because of a later planting season in Latin America. Sales in North America recovered from the impact of the 2019 China trade dispute and Asia grew strongly, thanks to new resource investment in the key crop markets of China, part of our 'fast grow' strategy, and India. We reinforced our position as innovation partner to the four largest agriculture multinationals, providing increasingly sustainable delivery systems. Syngenta awarded Croda its Supplier Partnership Award for 2020. New product innovation included Hydravance™ 200, which retains moisture in the soil, and Atplus™ DRT-EPS, to reduce pesticide drift. Beyond the crop majors, sales grew double-digit percentage with smaller customers. The Plant Impact biostimulant technology, acquired in 2018, is now fully integrated into the crop business, and significantly improved its profit performance in 2020.

Our Seed Enhancement business delivered double-digit percentage revenue growth in 2020, following some short-term insourcing by customers which had adversely impacted 2019. North America sales were resilient, despite reduced demand for vegetable crops associated with restaurant closures due to COVID-19. Europe, Asia and Latin America all drove the strong growth. Sustainability remains a key driver of future opportunity and, in 2020, we launched our novel patented technology to create coatings that are free of microplastics for vegetable and field crop seed treatment. The business is also working with Plant Impact to incorporate biostimulants into its seed treatments.

The Life Sciences 'Expand to Grow' strategy is being delivered both organically and through acquisition. This reflects the trends for more valuable patient health treatments and the environmental and social needs for increased crop yields delivered sustainably. Our strategic priorities are to:

- Build the Croda brand in Life Sciences, becoming the leading solution provider to global pharma and crop markets, whilst expanding geographically, particularly in emerging markets;
- Enhance our product portfolio organically and create more value by extending our drug and vaccine delivery and crop adjuvant technologies; and
- Acquire adjacent businesses and technologies in health and crop care with strong growth prospects.

This strategy is driven by innovation and investment. In 2020, NPP sales accounted for 27% of total sales (2019: 27%). The R&D pipeline is robust, supported by greater partnering, particularly in health care. We are deploying more capital to grow, investing £30m over three years in the expansion of our speciality excipient plants in the US and Japan. We reprioritised £10m of investment in the UK and US in 2020 to deliver vaccine scale-up requirements, with a further £40m expected to be invested in 2021 to more than double our GMP capacity in lipid technology for COVID-19 and other pipeline products. Across Life Sciences we are investing in digital capabilities, including the use of artificial intelligence to automate processes and improve customer service in Seed Enhancement.

Resilient sales in Performance Technologies in challenging markets

Sales in Performance Technologies were resilient in challenging industrial markets globally but profitability reduced significantly. After a good start to the year as customers initially secured inventory in the supply chain when COVID-19 took hold, sales progressively weakened during the second quarter alongside temporary closures of automotive and industrial plants, with sales in June almost 20% below prior year. The second half saw a steady recovery, with fourth quarter sales encouragingly 5% higher than prior year.

Sales declined by 3.2% and adjusted operating profit by 21.3%, in constant currency. Overall volume ended the year unchanged on the prior year but with a negative price/mix of 3%, reflecting a more competitive pricing environment in difficult market conditions. There were no acquisitions. In reported currency, sales also declined by 3.2% to £416.4m (2019: £430.2m) and adjusted operating profit reduced by 22.2% to £54.0m (2019: £69.4m). Return on sales was 13.0% (2019: 16.1%), with the reduction due to the higher operating leverage in this sector and lower production in European sites, a change in profit mix due to a sharp decline in sales in the higher margin Energy Technologies business and the sector's share of the ECO plant loss in the US. IFRS operating profit was £50.4m (2019: £63.8m).

There was a marked variation in the performance of the different businesses. Smart Materials was resilient, with sales ending slightly up on prior year, driven by record sales in packaging and hygiene markets from the need for greater protection of products from contamination and the use of polymer additives as a key component in many COVID-19 applications, including PPE and medical supplies. Within the Home, Fabric and Water business, hygiene and household care applications saw strong demand, reflecting both COVID-19-stimulated demand and increased sales of our ECO sustainable solutions. By contrast, the Energy Technologies business saw sales down over 15% in constant currency, impacted by sharply lower lubricant demand in automotive and reduced flow control additive sales for oil and gas as underlying production levels fell. By quarter four, demand had returned to some industrial and automotive markets, with Energy Technologies sales back to 2019 exit levels and Smart Materials remaining in growth, with a stronger order book by year end.

The strategy for Performance Technologies is to 'Refine to Grow'. The last two years have shown that the sector remains exposed to the industrial cycle. By redeploying capital selectively within the business, we will reduce exposure to older cyclical technologies and focus more on technology-rich markets, to:

- Focus on higher growth and more valuable markets where we have technical expertise and digital capabilities, thereby increasing the 'knowledge intensity' of the portfolio and reducing its capital intensity and operating leverage;
- Develop the sector's geographic footprint beyond its traditional European and US markets, especially in Asia; and
- Leverage the sector's strong sustainability credentials to meet customers' product needs and help them deliver their 'green' targets.

The Smart Materials business offers sustainable, low-carbon solutions and speciality effects primarily to global polymer and adhesive markets. Global use of polymers continues to grow but, by refining our portfolio, we are helping to move away from a linear plastics economy to a circular one, creating biodegradable and recyclable polymer solutions. In 2021 we will complete a £30m expansion project in the UK, allowing us to offer customers new technologies in high-value polymers for lightweight and durable applications. In Energy Technologies, whilst the internal combustion engine will remain important for many years to come, we are using our distinctive technologies to align to the sustainability-driven transition of industrial markets, such as renewable energy and mobility. This focus will see us move up the value chain and closer to Original Equipment Manufacturers (OEMs). In the automotive market we are working with global manufacturers to enhance drivetrain lubrication of electric vehicles and in 2020 we launched Hypermer Volt 4000™, a conductive carbon dispersant that improves battery capacity to meet electrification challenges across a range of industries. In Home Care we secured new sales to customers for our ECO sustainable surfactants, and delivered significant growth in Coltide Radiance™, a protein-based fabric conditioner technology that extends the life of fabrics, saving on textile waste.

Across Performance Technologies, we are shifting sales and innovation resources towards higher-growth regions, with encouraging sales progress in Asia and EEMEA in 2020. We established a new state-of-the-art applications laboratory in Shanghai to provide innovation and technical support to customers in China. Our innovation pipeline continues to improve, with NPP as a proportion of sector sales stable at 19% (2019: 19%). We are building on recent acquisitions and investments which support our R&D. In Smart Materials, Ionphase, a market-leading technology in permanent anti-static additives acquired in 2017, has a strong pipeline of opportunities in electronics, automotive and household applications. This follows a record year for revenue, profit and new applications in 2020, including the launch of an additive which controls static to avoid contamination of transparent plastic products. In Energy Technologies, Rewitec, which we acquired in 2019 and whose lubricant additives repair damage and extend the life of wind turbines, has completed several successful trials positioning it well for growth in 2021. In Home, Fabric and Water, as part of our innovation in biotechnology, a smart innovation partnership developed new probiotic ingredients for the homecare market, using application-specific bacteria strains to degrade organic matter, delivering superior cleaning and odour neutralisation as well as sustainability benefits.

Continued portfolio development in Industrial Chemicals

Industrial Chemicals activities continue to support the overall efficiency of Croda's Core Business and operating sites. 2020 saw a significant reduction in global demand for industrial chemicals, coupled with continued progress to reduce low-value co-product and tolling business. As a result, constant currency sales declined by 13.4%. In reported currency, sales were £96.4m (2019: £111.8m) with a small operating loss of £0.3m (2019: £1.1m profit). IFRS operating loss was £0.6m (2019: £0.2m profit).

Croda International Plc
Summary Financial Statements for the Year Ended 31 December 2020

Group Income Statement

for the year ended 31 December 2020

	Note	**2020** **Adjusted** **£m**	**2020** **Adjustments** **£m**	**2020** **Reported Total** **£m**	2019 restated† Adjusted £m	2019 Adjustments £m	2019 restated† Reported Total £m
Revenue	2	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		(312.5)	(29.6)	(342.1)	(291.5)	(19.8)	(311.3)
Operating profit	2	319.6	(29.6)	290.0	339.7	(19.8)	319.9
Financial costs	3	(19.5)	(1.5)	(21.0)	(18.5)	–	(18.5)
Financial income	3	0.5	–	0.5	0.9	–	0.9
Profit before tax		300.6	(31.1)	269.5	322.1	(19.8)	302.3
Tax	4	(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 2.

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

		Pence Adjusted	Pence Reported Total	Pence Adjusted	Pence Reported Total
Earnings per 10.61p ordinary share					
Basic	5	175.5	155.1	185.0	172.8
Diluted		175.3	154.8	184.6	172.4
Ordinary dividends paid in the year					
Interim	6		39.50		39.50
Final	6		50.50		49.00
Special	6		–		115.00

Group Statement of Comprehensive Income

for the year ended 31 December 2020

	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	51.3	(56.5)
Tax on items that will not be reclassified	(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		1,311.7	445.3
Property, plant and equipment	7	900.8	805.2
Right of use assets	8	80.1	46.2
Investments		5.2	4.7
Deferred tax assets		14.5	11.8
Retirement benefit assets		17.6	10.2
		2,329.9	1,323.4
Current assets			
Inventories		302.6	268.9
Trade and other receivables		289.9	216.8
Cash and cash equivalents		106.5	81.9
		699.0	567.6
Liabilities			
Current liabilities			
Trade and other payables		(240.5)	(163.9)
Borrowings and other financial liabilities		(49.1)	(109.5)
Lease liabilities		(10.7)	(7.8)
Provisions	9	(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		(776.2)	(476.6)
Lease liabilities		(71.0)	(35.7)
Other payables		(27.1)	(0.8)
Retirement benefit liabilities	9	(49.9)	(85.2)
Provisions	9	(3.9)	(5.3)
Deferred tax liabilities		(160.3)	(82.4)
		(1,088.4)	(686.0)
Net assets		1,595.1	868.6
Equity			
Ordinary share capital		15.1	14.0
Preference share capital		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		9.3	7.0
Total equity		1,595.1	868.6

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	6	–	–	–	(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	6	–	–	–	(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 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).

Group Statement of Cash Flows

for the year ended 31 December 2020

	Note	2020 £m	2019 £m
Cash flows from operating activities			
Adjusted operating profit		319.6	339.7
Exceptional items		(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
Impairment		1.4	1.4
Profit on disposal of property, plant and equipment		–	(3.8)
Net provisions charged		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		(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 from operating activities		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		(868.2)	(3.7)
Acquisition of associates and other investments		(1.5)	(1.3)
Purchase of property, plant and equipment		(115.0)	(105.2)
Purchase of other intangible assets		(6.2)	(5.8)
Proceeds from sale of property, plant and equipment		0.2	4.2
Cash paid against non-operating provisions		(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		(7.6)	(8.8)
Issue of ordinary shares		615.5	–
Net transactions in own shares		(6.9)	(4.3)
Dividends paid to equity shareholders	6	(115.9)	(266.9)
Net cash used in financing activities		722.4	(164.6)
Net movement in cash and cash equivalents		17.5	27.3
Cash and cash equivalents brought forward		63.1	40.3
Exchange differences		(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

Reconciliation to net debt

	Note	2020 £m	2019 £m
Net movement in cash and cash equivalents		17.5	27.3
Net movement in borrowings and other financial liabilities		(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		(800.5)	(547.7)

Notes to the Summary Financial Statements

1. Basis of preparation

The Company is a public limited company (Plc) incorporated and domiciled in the UK. The address of its registered office is Cowick Hall, Snaith, Goole, East Yorkshire DN14 9AA. The Company is listed on the London Stock Exchange. The financial information set out above does not constitute the Group's statutory financial statements for the years ended 31 December 2020 or 2019 but is derived from those financial statements. Statutory financial statements for 2019 have been delivered to the Registrar of Companies and those for 2020 will be delivered following the Company's Annual General Meeting. The auditor has reported on those financial statements; their reports were unqualified, did not draw attention to any matters by way of emphasis without qualifying their report and did not contain statements under s498(2) or (3) of the Companies Act 2006.

Going concern basis

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 further in note 9. The consolidated financial statements are 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 twelve 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 impacts of the UK leaving the EU and the recent trading experience outlined in the Finance Review.

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.

Changes in accounting policy

In preparing this financial information, management has used the principal accounting policies that will be detailed in the Group's Annual Report for 2020 and which are unchanged from the prior year, except as detailed below.

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.

1. Basis of preparation continued

(a) New and amended standards adopted by the Group

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.

(b) 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 the consolidated financial statements. None of these is expected to have a significant effect on the consolidated financial statements of the Group.

2. Segmental information

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.

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.

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).

The adjustments to operating profit relate to our segments as follows: 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).

	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	(29.6)	(19.8)
Total Group operating profit	290.0	319.9

2. Segmental information continued

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	Reported 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		
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

3. 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

4. Tax

	2020 £m	2019 £m
Analysis of tax charge for the year		
United Kingdom current tax	13.2	15.1
Overseas current tax	52.1	50.5
Deferred tax	2.6	12.9
	67.9	78.5

5. Earnings per share

	2020 pence	2019 pence
Adjusted earnings per share	175.5	185.0
Impact of exceptional items, acquisition costs, amortisation of intangible assets arising on acquisition and the tax thereon	(20.4)	(12.2)
Basic earnings per share	155.1	172.8

6. Dividends paid

	Pence per share (2020)	2020 £m	Pence per share (2019)	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. The total proposed dividend for the year ended 31 December 2020 will be 91.0p per share amounting to £122.6m.

7. Property, plant and equipment

	2020 £m	2019 £m
Opening net book amount	805.2	780.3
Exchange differences	(13.1)	(27.5)
Additions	115.0	105.2
Acquisitions	50.9	–
Disposals, write offs and reclassifications	(0.6)	(5.3)
Depreciation charge for the year	(55.5)	(46.8)
Impairments	(1.1)	(0.7)
Closing net book amount	900.8	805.2

Reclassifications in the prior period primarily relate to long-term lease assets reclassified from Property, plant and equipment to Right of use assets.

8. Right of use assets

	2020 £m	2019 £m
Opening net book amount (2019 on transition)	46.2	46.0
Exchange differences	(1.7)	(1.6)
Additions	43.8	11.6
Acquisitions	2.5	–
Remeasurements	0.4	(5.4)
Other disposals and write offs	(0.2)	(0.2)
Reclassifications	–	4.7
Depreciation charge for the year	(10.6)	(8.8)
Impairments	(0.3)	(0.1)
Closing net book amount	80.1	46.2

9. Critical accounting judgements and key sources of estimation uncertainty

The Group's significant accounting policies under IFRS have been established 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 IFRS 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:

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 10 unless the possibility of a loss arising is considered remote.

At 31 December 2020, the Group has an environmental provision of £6.3m (2019: £8.1m) in respect of soil and potential ground water 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 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.

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

Post-retirement benefits

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. Total Group net retirement benefit liabilities have decreased by £42.7m in 2020 to £32.3m. This movement comprises £7.7m of service costs in excess of contributions and £1.2m of net financial costs offset by £49.1m of gains due to changes in actuarial assumptions, £2.2m of experience gains and £0.3m of currency translation gains.

9. Critical accounting judgements and key sources of estimation uncertainty continued

Goodwill

Management are required to undertake an annual test for impairment of indefinite lived assets such as goodwill, both annually and when there are indications that the carrying value may not be recoverable. Accordingly, the Group tests 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. Critical assumptions include the terminal value growth in EBITDA and the selection of appropriate discount rates.

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.

Valuation of acquired intangible assets

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.

10. Contingent liabilities

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

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.

11. Borrowings and financial instruments

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. These summary financial statements do not include all financial risk management information; full disclosures will be available in the Group's annual financial statements for the year ended 31 December 2020.

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.

11. Borrowings and financial instruments continued

Fair values

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 (excluding continent consideration which is discounted using a risk-adjusted discount rate).

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.

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 Group's financial assets and liabilities where book values and fair values differ.

	Book value 2020 £m	**Fair value 2020 £m**	Book value 2019 £m	Fair value 2019 £m
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)

12. Related party transactions

The Group has no related party transactions, with the exception of remuneration paid to key management and Directors.

13. Business combinations

On 12 August 2020, the Group acquired 100% of the shares and voting interests of Avanti Polar Lipids, LLC for total consideration of £173.9m inclusive of £35.5m contingent consideration (presented within other payables). Avanti is 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. The contingent consideration represents the gross fair value at the date of acquisition of £42.1m before discounting and 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.

On 24 November 2020, the Group acquired 100% of the shares and voting interests of Fragrance Spanish Topco, S.L. trading as Iberchem ('Iberchem'), for a total cash consideration of £756.5m. Iberchem is 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.

13. 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
Working capital, cash and lease liabilities	(0.2)	70.9
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

During 2020, the Group completed the fair value review relating to its 2019 acquisition of Rewitec® GmbH. This review did not identify any changes to the asset base or goodwill.

14. 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.

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report and the Group and parent Company financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare Group and parent Company financial statements for each financial year. Under that law they are required to prepare the Group financial statements in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and applicable law and have elected to prepare the parent Company financial statements in accordance with UK accounting standards and applicable law, including FRS 101 Reduced Disclosure Framework. In addition, the Group financial statements are required under the UK Disclosure Guidance and Transparency Rules to be prepared in accordance with International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union.

Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and parent Company and of the Group's profit or loss for that period. In preparing each of the Group and parent Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant and reliable;
- for the Group financial statements, state whether they have been 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;
- for the parent Company financial statements, state whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the parent company financial statements;
- assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use 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.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for 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, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the Directors are also responsible for preparing a Strategic Report, Directors' Report, Directors' Remuneration Report and Corporate Governance Statement that complies with that law and those regulations.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Responsibility statement of the Directors in respect of the annual financial report

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- the Strategic Report includes a fair review of the development and performance of the business and the position of the issuer and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

We consider the Annual Report and Accounts, 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.