

Press Release

27 July 2021

Results for the six months ended 30 June 2021

Record first half performance reflecting accelerated strategic implementation

Croda International Plc (“Croda” or the “Group”) announces its half year results for the six months ended 30 June 2021. This announcement contains inside information.

Highlights

Half year ended 30 June	Statutory results (IFRS)			Adjusted results			
	2021	2020	change	2021	2020	change	change constant currency
Sales (£m)	934.0	672.9	38.8%	934.0	672.9	38.8%	46.9%
Operating profit (£m)	218.5	154.0	41.9%	242.1	161.6	49.8%	58.7%
Return on sales (%)				25.9	24.0	190bps	
Profit before tax (£m)	204.1	144.9	40.9%	229.5	152.5	50.5%	59.5%
Basic earnings per share (p)	110.0	84.1	30.8%	124.0	88.8	39.6%	48.0%
Ordinary dividend per share (p)	43.5	39.5	10.1%				
Free cash flow (£m)				42.7	80.2	(46.8)%	

Record performance driven by accelerated strategic implementation

- Excellent underlying growth across all sectors
 - Underlying sales up 27% on 2020, including successful raw material price recovery
 - Sales now well above 2019 levels, up over 10% in underlying terms (before the benefit of lipid systems[†])
 - Strong Consumer Care and Performance Technologies performances, driven by end consumer recovery, customer inventory build and demand for sustainable solutions
 - Benefitting from significant capital investment over last 12 months, together with increased innovation
- Successful delivery from recent acquisitions opening up new fast growth markets
 - Iberchem profit performance in line with plan; Avanti significantly ahead
 - Integration and synergy delivery on track; additional bolt-on acquisitions completed in Consumer Care
- Continued success in building Life Sciences platform
 - Outstanding Health Care performance – continued sales growth of vaccine adjuvants and speciality excipients, supplemented by over US\$100m of lipid system sales for COVID-19 applications
 - Organic growth and acquisition resulting in near doubling of adjusted operating profit
 - Over £40m invested in Health Care capacity expansion this half year, reinforcing leading niche positions

Excellent first half financial results

- Reported sales up 39%, driven by organic growth and acquisitions
- Improving margin driving excellent profit growth
 - Return on sales up 190 basis points – Life Sciences performance supported by progress in Consumer Care and Performance Technologies
 - Record adjusted profit before tax at £229.5m, up over 50% on 2020 and 35% on 2019
 - IFRS profit before tax up over 40% to £204.1m (2020: £144.9m)
- Leverage reduced to 1.7x EBITDA, despite increased capital investment and demand-driven working capital build
- Interim ordinary dividend up 10% to 43.5p, continuing an unbroken trend of increasing returns over nearly 30 years

Sector performance*

Sales	Half year ended 30 June						2020
	2021 £m	Price/mix	Volume	Acquisition	Currency	Change	Restated £m
Consumer Care	367.0	7.6%	10.8%	37.8%	(10.0)%	46.2%	251.1*
Life Sciences	290.4	41.6%	5.8%	22.7%	(8.6)%	61.5%	179.8*
Performance Technologies	223.7	3.1%	17.5%	-	(5.9)%	14.7%	195.0*
Industrial Chemicals	52.9	2.8%	15.2%	-	(5.4)%	12.6%	47.0
Group	934.0	13.5%	13.3%	20.1%	(8.1)%	38.8%	672.9

Underlying sales growth (excluding lipid systems)	Half year change 2021 vs. 2019
Consumer Care	10.2%
Life Sciences	14.5%
Performance Technologies	10.6%
Industrial Chemicals	(2.7)%
Group	10.4%

This table compares sales against the first half of 2019 to remove the disruption to the first half of 2020 caused by the COVID-19 pandemic. Lipid systems have been excluded to give a more informative comparator to 2019, given the sales arising from COVID-19 contracts secured since 2019

Adjusted profit	Half year ended 30 June					2020 restated £m	Change
	2021 £m	Underlying growth £m	Acquisition impact £m	Currency impact £m	2020 restated £m		
Consumer Care	90.4	7.8	14.2	(5.3)	73.7*	22.7%	
Life Sciences	114.2	40.6	23.4	(7.6)	57.8*	97.6%	
Performance Technologies	34.8	6.5	-	(1.2)	29.5*	18.0%	
Industrial Chemicals	2.7	2.3	-	(0.2)	0.6	350.0%	
Operating profit	242.1	57.2	37.6	(14.3)	161.6	49.8%	
Net interest	(12.6)				(9.1)	(38.5)%	
Profit before tax	229.5				152.5	50.5%	

**indicates that sector results for half year 2020 have been restated to reflect the Group's new reporting structure*

All sectors delivering strong growth:

- Outstanding performance in Life Sciences, growing sales by over 60% and improving return on sales to 39.3% (2020*: 32.1%), reflecting continued growth in higher value add niches
- Strong improvement in Consumer Care performance, growing sales by 46% and adjusted operating profit by almost £17m, driven by:
 - Significant progress in Personal Care, including improved mix through recovery in Beauty Actives
 - Successful integration of Iberchem acquisition, supplemented by Parfex acquisition in fine fragrances
 - Acquisition of Alban Muller, boosting natural ingredient portfolio in Beauty Actives
- Demand recovery in Performance Technologies, growing sales by 15% and improving return on sales to 15.6%, significant progress on second half year 2020 return on sales of 10.9%*

Steve Foots, Chief Executive Officer, commented:

“Our record first half performance reflects the impact of our strategic acceleration and investments, supported by improving customer demand across all regions and sectors. This has been delivered through excellent growth in our existing businesses, successful delivery from our recent acquisitions and continued success in building our Life Sciences platform. With the strategic review of our Performance Technologies business well underway, we continue our transition to becoming a pure play consumer facing ingredients company.

“I am excited by Croda’s increasing opportunities in emerging technology platforms and faster growth markets, where demand for sustainable solutions will drive our progress going forward. We are investing in organic and inorganic expansion, continuing our relentless innovation and focusing on sustainability across everything we do. This is creating new avenues for future growth, delivering significant value for our shareholders.”

Outlook

The first half year has seen a strong performance across the Group, reflecting the global recovery in demand, the accelerated implementation of our strategic priorities and increased investment.

We expect underlying growth across all sectors to continue in the second half year, driven by consumer demand, whilst the customer restocking seen in the first half is expected to moderate. Together with the benefit of recent acquisitions opening up new fast growth markets, we expect continued strong demand for lipid systems and are increasing guidance for sales this year to at least US\$200m.

We now expect 2021 full year adjusted profit before tax to be significantly ahead of current expectations. Subject to there being no material change in current market conditions, we expect a similar phasing of profit between the first and second half periods as seen in previous years.

Demand for COVID-19 solution ingredients remains uncertain beyond the short term and the current level of sales could moderate; however, we expect to see an ongoing expansion in the range of applications for lipid systems in vaccines and therapeutic drugs over the medium term. Across the wider Group, the combination of our differentiated business model, healthy innovation pipeline and recent investment is expected to underpin performance and continue to generate increased value for all our stakeholders.

Further information:

This announcement contains inside information for the purposes of Article 7 of the Market Abuse Regulations (Regulation (EU) No.596/2014). For the purposes of MAR and Article 2 of Commission Implementing Regulation (EU) 2016/1055, this announcement is being made on behalf of the Company by David Bishop, Investor Relations Director.

An analyst presentation will be available via webcast at 0900 BST on 27 July 2021 at www.croda.com/investors.

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Notes:

[†] *Lipid systems comprise lipid excipients and other Avanti lipid technology products. They are excluded from this growth calculation to give a more informative comparator to 2019, given the sales arising from COVID-19 contracts secured since 2019. Alternative Performance Measures (APMs): We use a number of APMs to assist in presenting information in this statement in an easily analysable and comparable 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 the Finance Review;
- Underlying sales: these reflect constant currency values adjusted to exclude the impact of acquisitions. They are reconciled to reported sales in the Finance Review;
- Adjusted results: these are stated before exceptional items 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;
- 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 or disposals in the last 12 month period. EBITDA is adjusted operating profit plus depreciation and amortisation;
- 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.

Croda International Plc

Group Performance Review

Adjusted results are stated before exceptional items and amortisation of intangible assets arising on acquisition, and tax thereon. For a description of these adjustments and definitions of all alternative performance measures, see the Finance Review. Underlying sales reflect constant currency values adjusted to exclude the impact of acquisitions. Constant currency results reflect current year performance for existing business translated at the prior year's average exchange rates.

**Indicates that sector results for half year 2020 have been restated to reflect the Group's new reporting structure. All comparators are first half 2020 unless otherwise stated.*

Record performance driven by accelerated strategic implementation

The first half year has seen a strong performance across the Group, enabled by the accelerated implementation of our strategic priorities, increased organic investment and the broader global recovery in demand. We have achieved excellent underlying growth across all sectors; successfully delivered from our recent acquisitions opening up new fast growth markets; and secured continued success in expanding our Life Sciences platform.

Our priorities during the COVID-19 pandemic have been to protect the health and safety of our employees and balance the needs of all our stakeholders fairly. Our colleagues have continued to demonstrate remarkable personal resilience and commitment to serve our customers almost eighteen months into the crisis, particularly as a growing number of colleagues are having to self-isolate at a time of increased demand.

Our focus on accelerating key elements of our strategy over the last 12 months has ensured that Croda is well positioned to benefit from the recovery in consumer demand, as lockdowns are lifted, and to capitalise on developing trends in existing and emerging markets, notably increasing demand for sustainable solutions. After a resilient performance in 2020, Croda has returned to strong sales and profit growth in the first half of 2021. At the same time, we are focused on the fast growth markets of the future, unlocking value from our investment of almost £1bn last year in acquisitions and capacity expansion, as well as investing nearly £140m in capital expenditure and acquisitions in the first half of 2021, to deliver sustainable future growth.

Excellent first half financial results

Group performance has been driven by a return of demand for the underlying business across all sectors, successful progress in integrating the second half 2020 acquisitions of Iberchem and Avanti, and an outstanding performance in Life Sciences. Despite the return of COVID-19 infection control measures to many countries during the early part of the year, customer demand has been less impacted than in previous lockdowns. In addition, end consumer demand has recovered well in many countries, most notably the Americas and parts of Asia, and, even in those countries still impacted by lockdowns, our demand has benefitted from customer restocking in anticipation of recovery. The first half year has also seen rising raw material costs, which we have successfully recovered.

Sales grew by 39% year-on-year, to £934.0m (2020: £672.9m). Underlying sales were up 27% and acquisitions added 20% (at constant currency), while the adverse impact from currency translation was 8%, reflecting the strengthening of Sterling during the period. Given the disruption to last year's sales caused by the start of the pandemic, it is perhaps more notable to see the strength of underlying sales measured against the first half of 2019, up over 10% (before the additional benefit of lipid systems which were introduced in 2020). The recovery of increased raw material costs added around 5% to first half average sales prices, alongside substantial volume growth across the business.

Return on sales also improved, up 190 basis points to 25.9% (2020: 24.0%). This reflected the continued growth of higher value add technology platforms in Life Sciences, an improved business mix in the Personal Care business within Consumer Care, and the positive impact of volume recovery on operating leverage in Performance Technologies. These benefits were partly offset by margin dilution from a full half year of Iberchem and an increased remuneration incentive charge to reflect the strong results. The combination of sales growth, acquisition and improved margin saw reported profit before tax (on an IFRS basis) increase by £59.2m to £204.1m (2020: £144.9m) and adjusted profit before tax increase by over 50% on 2020 to a record first half year result of £229.5m (2020: £152.5m). Adjusted profit before tax was 35% higher than the first half of 2019.

We achieved continued success in building out our Life Sciences platforms. An outstanding Health Care performance saw sales of vaccine adjuvants and speciality excipients each grow by more than two thirds. The scale-up of Avanti's technology platform within Croda saw lipid system sales exceed US\$100m, with our principal COVID-19 vaccine contract supplemented by additional drug and vaccine applications, albeit at smaller scale. We are now working on more than 100 COVID-19 projects in 20 countries across our three patient health platforms. Adjusted operating profit in Life Sciences almost doubled through this combination of excellent organic growth, successful acquisition integration and demand for COVID-19 solutions.

Deploying capital for future growth

We continue to deploy capital to deliver sustainable growth in life science and consumer markets. In the first half year, capital expenditure exceeded £80m, as we accelerated our investment programme to build new capacity in fast growth market niches. Drug delivery offers the most significant global opportunity for growth and we are investing in new manufacturing capacity to serve patient health care markets. We invested over £40m in Health Care capacity expansion in the first half year, reinforcing our leading positions in drug and vaccine delivery systems. We are expanding our GMP capability in vaccine adjuvants and are currently completing investments in lipid system capacity in Avanti in the US and in our UK scale-up site. Whilst initially serving current strong demand for emergency COVID-19 vaccines, this capacity will increasingly unlock future opportunities in new mRNA and gene therapy applications. We have also commissioned a £30m investment which has doubled capacity of speciality excipients in the US.

In Consumer Care, we invested in the acquisition of two businesses which accelerate our transition to more natural raw materials, an important differentiator in this market. In March, we acquired natural actives specialist Alban Muller for a total enterprise value of €25m, expanding our portfolio of natural ingredients in our global leading Beauty Actives business. In June, we completed the acquisition of Parfex for a total enterprise value of €45m. This acquisition increases Iberchem's sustainable fragrance offerings and reinforces Iberchem's superior growth profile with greater access to fine fragrances. Alongside these, the Consumer Care business is benefitting from our bio-based surfactants plant in the US which has been fully operational since March, enabling us to produce sought-after sustainable ingredients that deliver identical performance to petrochemical peers.

Alongside reinvesting to deliver organic growth and acquiring disruptive technologies, our capital allocation priorities are to provide a regular dividend to shareholders and to operate with an appropriate balance sheet. Higher profitability saw debt leverage reduce to 1.7x EBITDA (full year 2020: 1.8x), despite the increased capital expenditure and a demand-driven working capital build, with free cash flow of £42.7m (2020: £80.2m). The 2021 interim ordinary dividend is being increased by 10% per share to 43.5p (2020: 39.5p) and by 19% in cash terms, following last year's acquisition funding share placing.

Strong growth across all sectors

2021 saw the creation of the Consumer Care sector, comprising Croda's leading global position in Personal Care, its growing Home Care business and the Iberchem fragrances business, acquired in November 2020. The first half of 2021 saw an excellent sales performance, up 46%, with underlying sales growth of 18% supplemented by a 38% increase from acquisitions, partly offset by an adverse impact of currency translation of 10%. After a steady recovery in the second half of 2020 from the negative impact of COVID-19 on 'going out' sales of actives and cosmetics, Personal Care improved rapidly in the first half of 2021, led by a resurgence in Beauty Actives and by strong regional demand in the Americas, to be 8% above 2019 in underlying terms. This enriched product mix benefitted margin. Innovation is focused on natural ingredients and biotechnology to meet growing consumer demand, with Beauty Actives launching Ameyezing™, a biodegradable product with its origins in wild ginger that improves the appearance of dark eye circles.

Iberchem has proven to be an excellent acquisition; its underlying sales grew at 12% in the first half year, integration with Croda's sales network is progressing well and the first cross-selling opportunities are underway, including a new fragrance operation being established through Croda Brazil. Growth continued in Home Care, reflecting an ongoing consumer focus on hygiene and new sales from Croda's innovative fabric care offering. Consumer Care adjusted operating profit increased by 23% (and by 9% on an IFRS basis), with return on sales of 24.6% (2020*: 29.4%), the reduction reflecting the dilution impact of Iberchem and a higher remuneration incentive charge.

Life Sciences continues to develop into a business to rival Croda's long held leadership in Consumer Care markets. With its focus on drug, vaccine and crop science delivery systems, the sector is growing sales through organic expansion and by leveraging acquired technologies using Croda's existing scale-up capabilities. The business is moving into higher value, lower volume niches, delivering essential functionality for customers' drug, vaccine and crop science products. The first half year saw sales up 61% and adjusted operating profit almost double over the first half of 2020. Whilst much of this reflected growth from scale-up of lipid systems at Croda sites, reflecting current peak demand for COVID-19 vaccines, the rest of the Life Sciences portfolio grew underlying sales by 17% including sales of vaccine adjuvants and speciality excipients both growing by over two thirds. Crop Protection and Seed Enhancement also delivered double-digit percentage growth on an underlying basis. Avanti added 23% to sector sales.

With growth in higher value add niches, Life Sciences adjusted operating profit increased by 98% (and by 98% in IFRS terms), with return on sales rising to 39.3% (2020*: 32.1%). Achieving this level of growth and profit improvement in such a short period has placed significant demands on the business, our manufacturing capability and, most of all, our people. The margin level and growth rate will moderate in the future as we bring new capacity on stream to refine and expand the manufacturing process and emergency COVID-19 demand normalises. We are proud of the contribution we have made to relieving the pandemic's challenge and the opportunities for future growth in two globally critical areas, Health Care and Crop Care, are exciting.

After a challenging two years, Performance Technologies has recovered well in 2021. Sales have grown by 15% through a recovery in industrial end markets and sustainability driven demand across multiple niche applications, with underlying sales growth of 21%. Adjusted operating profit increased by 18% (and by 13% in IFRS terms), as higher sales positively impacted operating leverage through higher production volumes. Return on sales was 15.6% (2020*: 15.1%), a significant improvement on 10.9%* achieved in the second half of 2020. Smart Materials continued to benefit from good demand in packaging and polymer applications, whilst the progressive recovery in industrial markets saw Energy Technologies return to growth, supported by increased exposure to next generation applications, such as electric vehicles.

In May, we announced a strategic review of the Performance Technologies and Industrial Chemicals ('PTIC') businesses to establish what ownership structure would best serve this part of Croda's business going forward, creating a stronger platform for its future growth while allowing more capital to be deployed into the higher returning Consumer Care and Life Sciences businesses. PTIC is an excellent, world leading business, delivering industry leading margins across the cycle. We have now defined a perimeter and scope for those PTIC activities which can form the strongest possible portfolio as a separate business and are non-core to Consumer Care and Life Sciences. We have concluded that up to an equivalent of 75% of the revenue of the current PTIC portfolio could be included in the scope of any potential divestment and are now assessing how the full potential of these assets can best be delivered, with the review expected to conclude by the end of 2021.

A Purpose-led consumer-facing ingredients company

Through the strategic moves that we have made over the last 12 months, we are increasingly exposed to fast growth life science and consumer markets, which now represent 85% of the Group's profitability. Sustainability trends are increasing rapidly in these markets as economies recover from COVID-19, driven by regulatory change and consumer demand. We believe that delivering sustainability, together with our relentless focus on innovation, will allow us to achieve our strategic objective of consistent top and bottom line growth, with profit growing ahead of sales, ahead of volume.

Croda was built on a foundation of using science to turn renewable raw materials into innovative ingredients. Today, our Purpose is to use Smart science to improve lives™, and we are committed to being the most sustainable supplier of innovative ingredients by being Climate, Land and People Positive by 2030. It is the right thing to do but it is also what our customers and consumers are increasingly demanding; accelerating the transition to sustainable ingredients makes clear commercial, as well as ethical, sense.

Leveraging our leading position in renewable raw materials, we enable our customers to meet their sustainability commitments through focusing more of our innovation on sustainable ingredients, ethical sourcing, greater ingredient transparency and sustainable manufacture. We have decarbonisation roadmaps in place for sites accounting for over 90% of our carbon emissions, supported by an internal carbon price to facilitate improved decision making. We are now one of only three major chemical companies worldwide to have our 1.5°C target verified by the Science Based Targets initiative (SBTi). This commits us to delivering improvements in line with the objective to limit global temperature rises to no more than 1.5°C above pre-industrial levels, the most ambitious SBTi pathway. In recognition of Croda's position as a sustainability leader, we were ranked number one of the 1,000 largest publicly listed companies outside the US in the Barrons' Most Sustainable International Company rankings.

We are also committed to being a safe company for our employees and communities. With the inclusion of recent acquisitions into Group metrics, the Total Recordable Incident Rate ('TRIR') rose to 0.70 for the first half of the year, excluding COVID-19 cases (2020 full year: 0.54). We are targeting to reduce this to 0.3 by 2025.

It is the combination of sustainability and innovation that drives value to our customers. Our innovation pipeline is robust and our innovation strategy combines internal R&D with external technology investments and partnerships, augmenting Croda's 48 global innovation centres with a network of over 500 academic and SME partners working on more than 100 innovation projects. An increasing proportion of innovation is focused on sustainability; we are scaling our biotechnology investment to develop disruptive technologies and more sustainable products, augmenting close to 50 biotech products that have been launched by our Beauty Actives business alone. In line with our strategic objective of increasing the proportion of New and Protected Products ('NPP') that we sell, NPP as a percentage of sales increased to 28% (2020: 27%) or to 38% including the Iberchem and Avanti acquisitions and lipid system sales. We opened a new innovation centre in Shanghai, enabling us to work on collaborative projects with customers from China and North Asia, and have commenced a multi-million pound project to improve innovation collaboration, deliver artificial intelligence and utilise data mining across our global R&D knowledge base.

Outlook

The first half year has seen a strong performance across the Group, reflecting the global recovery in demand, the accelerated implementation of our strategic priorities and increased investment.

We expect underlying growth across all sectors to continue in the second half year, driven by consumer demand, whilst the customer restocking seen in the first half is expected to moderate. Together with the benefit of recent acquisitions opening up new fast growth markets, we expect continued strong demand for lipid systems and are increasing guidance for sales this year to at least US\$200m.

We now expect 2021 full year adjusted profit before tax to be significantly ahead of current expectations. Subject to there being no material change in current market conditions, we expect a similar phasing of profit between the first and second half periods as seen in previous years.

Demand for COVID-19 solution ingredients remains uncertain beyond the short term and the current level of sales could moderate; however, we expect to see an ongoing expansion in the range of applications for lipid systems in vaccines and therapeutic drugs over the medium term. Across the wider Group, the combination of our differentiated business model, healthy innovation pipeline and recent investment is expected to underpin performance and continue to generate increased value for all our stakeholders.

Finance Review

Adverse impact from currency translation

Sterling strengthened during the period, particularly against the US Dollar. The average Sterling exchange rates against the Group's key currencies were US\$1.388 (2020: US\$1.261) and €1.152 (2020: €1.145). As a result, currency translation reduced sales by £54.5m and adjusted operating profit by £14.3m. Transactional currency impact is correlated with translation, given that the UK and EU are meaningful centres of production for the Group, with the strength of Sterling adversely impacting margins, particularly from Europe into US Dollar priced markets.

Strong sales from organic growth and acquisition

Sales grew by 38.8% to £934.0m (2020: £672.9m), comprising underlying growth of 26.8% and acquisition benefit of 20.1%, partly offset by adverse currency translation of 8.1%. Underlying sales growth comprised approximately 8 percentage points of growth coming from lipid systems (manufactured at existing Croda sites which have scaled Avanti's technology under contracts which were in place between Croda and Avanti prior to the acquisition of Avanti) and 19% growth in the rest of the Croda business. Acquisition sales growth comprised 14 percentage points of growth from Iberchem and 6 percentage points from Avanti.

Sales/price mix improved by 13.5%, reflecting a better product mix and successful recovery of raw material cost increases. Volume was 13.3% higher, as the impact of economic recovery on consumer demand was accentuated by customer restocking.

Half year ended 30 June

Sales	2021 £m	Price/mix	Volume	Acquisition	Currency	Change	2020 Restated £m
Consumer Care	367.0	7.6%	10.8%	37.8%	(10.0)%	46.2%	251.1*
Life Sciences	290.4	41.6%	5.8%	22.7%	(8.6)%	61.5%	179.8*
Performance Technologies	223.7	3.1%	17.5%	-	(5.9)%	14.7%	195.0*
Industrial Chemicals	52.9	2.8%	15.2%	-	(5.4)%	12.6%	47.0
Group	934.0	13.5%	13.3%	20.1%	(8.1)%	38.8%	672.9

Sales performance was strong across all sectors, led by Life Sciences where sales were up 61.5%, driven by growth across the board and over US\$100m of sales into the lipid systems platform. With progressive volume growth in consumer and industrial end markets, sales increased by 46.2% in Consumer Care and 14.7% in Performance Technologies, augmented by customer restocking and raw material cost recovery.

Underlying sales were also over 10% ahead of the first half of 2019 (excluding sales of lipid systems introduced since 2019, to provide a better basis of comparison), demonstrating significant growth against pre-pandemic levels. Consumer Care, Life Sciences and Performance Technologies were all up double-digit percentage on 2019.

Underlying sales growth (excluding lipid systems)	Half year change 2021 vs. 2019
Consumer Care	10.2%
Life Sciences	14.5%
Performance Technologies	10.6%
Industrial Chemicals	(2.7)%
Group	10.4%

Record profit and improved margin

The first half year has seen the most significant upward movement in raw material prices for over seven years. Croda's operating model is to recover such increases as they occur and this has been delivered. The resultant average increase in selling prices is estimated to have been around 5% in the first half year. There has been some disruption and shortages in the supply of certain raw materials and in the availability of freight, impacting costs, but overall we have managed these challenges effectively. The first half year has also seen new working arrangements adopted following the end of the Transition Period for the UK's exit from the European Union (EU). Implementation of our new European trading model has been successful, although external factors have continued to constrain our ability to ship certain categories of products and have impacted freight costs. In addition, 2021 includes a significantly higher remuneration incentive charge, covering bonus and share-based payment costs, reflecting the enhanced profit and share price performance; this has reduced year-on-year margin improvement by over two percentage points.

	2021			2020		
	IFRS £m	Adjustments £m	Adjusted £m	IFRS £m	Adjustments £m	Adjusted £m
Sales	934.0	-	934.0	672.9	-	672.9
Cost of sales	(463.5)	-	(463.5)	(362.4)	-	(362.4)
Gross profit	470.5	-	470.5	310.5	-	310.5
Operating costs	(252.0)	(23.6)	(228.4)	(156.5)	(7.6)	(148.9)
Operating profit	218.5	(23.6)	242.1	154.0	(7.6)	161.6
Net interest charge	(14.4)	(1.8)	(12.6)	(9.1)	-	(9.1)
Profit before tax	204.1	(25.4)	229.5	144.9	(7.6)	152.5
Tax	(50.0)	6.0	(56.0)	(36.6)	1.5	(38.1)
Profit after tax	154.1	(19.4)	173.5	108.3	(6.1)	114.4

IFRS operating profit increased by 41.9% to £218.5m (2020: £154.0m). The charge for adjusting items before tax was £25.4m (2020: £7.6m), with an increase in the charge for amortisation of intangible assets to £16.8m (2020: £4.9m), following recent acquisitions. The charge for exceptional items was £8.6m (2020: £2.7m), consisting of a £1.8m discount unwind and £3.1m fair value increase for the Avanti acquisition, as we now expect the earn-out payable on the Avanti acquisition to reach its maximum level following strong trading, and £3.7m of business acquisition and disposal costs, primarily relating to preparing part of the PTIC business for potential sale. Adjusted operating profit increased by 49.8% to £242.1m (2020: £161.6m), reflecting higher sales and an improved business mix. Return on sales improved to 25.9% (2020: 24.0%), despite the higher remuneration incentive charge.

With the net interest charge increasing to £12.6m (2020: £9.1m), reflecting higher net debt following recent acquisitions and a loan write-off, adjusted profit before tax increased by 50.5% to £229.5m (2020: £152.5m). IFRS profit before tax increased by 40.9% to £204.1m (2020: £144.9m).

The effective tax rate on adjusted profit was broadly unchanged at 24.4% (2020: 25.0%) and there were no significant adjustments between the Group's expected and reported tax charge based on its accounting profit. With an increase in shares in issue following the equity placing to acquire Iberchem in late 2020, IFRS basic earnings per share (EPS) were 110.0p (2020: 84.1p) and adjusted basic EPS increased by 39.6% to 124.0p (2020: 88.8p).

Profit performance was strong across all sectors, led by Life Sciences where adjusted operating profit was up 97.6%, reflecting sales growth and an improvement in product mix towards higher value add niches. Consumer Care adjusted operating profit rose 22.7%, benefitting from improved business mix in Personal Care and the inclusion of Iberchem, following its acquisition in November 2020. Performance Technologies benefitting from the recovery in demand and significant improvement in return on sales, compared to second half 2020, driven by higher volume and a positive impact from operating leverage, with adjusted operating profit 18.0% higher.

	2021			2020 restated		
	IFRS £m	Adjustments £m	Adjusted £m	IFRS £m	Adjustments £m	Adjusted £m
Operating profit						
Consumer Care	79.4	(11.0)	90.4	72.6*	(1.1)	73.7*
Life Sciences	105.1	(9.1)	114.2	53.2*	(4.6)	57.8*
Performance Technologies	31.3	(3.5)	34.8	27.7*	(1.8)	29.5*
Industrial Chemicals	2.7	-	2.7	0.5	(0.1)	0.6
Group	218.5	(23.6)	242.1	154.0	(7.6)	161.6

Underlying growth across the sectors added £57.2m to adjusted operating profit, acquisitions contributed £37.6m and currency represented a £14.3m headwind.

	2021 £m	Half year ended 30 June			2020 restated £m	Change
		Underlying growth £m	Acquisition impact £m	Currency impact £m		
Adjusted profit						
Consumer Care	90.4	7.8	14.2	(5.3)	73.7*	22.7%
Life Sciences	114.2	40.6	23.4	(7.6)	57.8*	97.6%
Performance Technologies	34.8	6.5	-	(1.2)	29.5*	18.0%
Industrial Chemicals	2.7	2.3	-	(0.2)	0.6	350.0%
Operating profit	242.1	57.2	37.6	(14.3)	161.6	49.8%
Net interest	(12.6)				(9.1)	(38.5)%
Profit before tax	229.5				152.5	50.5%

Lower free cash flow reflecting higher investment and demand growth

Free cash flow fell to £42.7m (2020: £80.2m) as a result of a working capital build associated with the growth in demand and the increase in capital expenditure set out in the Group Performance Review above.

	Half year ended 30 June	
	2021 £m	2020 £m
Cash flow		
Adjusted operating profit	242.1	161.6
Depreciation and amortisation	38.2	31.8
EBITDA	280.3	193.4
Working capital	(98.4)	(13.5)
Net capital expenditure	(81.6)	(50.9)
Payment of lease liabilities	(6.8)	(4.9)
Non-cash pension expense	6.1	4.3
Interest & tax	(56.9)	(48.2)
Free cash flow	42.7	80.2
Dividends	(71.8)	(65.0)
Acquisitions	(55.5)	-
Other cash movements	5.4	(12.4)
Net cash flow	(79.2)	2.8
Net movement in borrowings	77.5	(17.1)
Net movement in cash and cash equivalents	(1.7)	(14.3)

Total investment in organic capital spend and inorganic acquisition totalled £137.1m (2020: £50.9m), creating new technology platforms and expanding capacity for future growth. This reflects elements 1 and 3 from the Group's capital allocation policy below, to:

- 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;
- Provide regular returns to shareholders** – pay a regular dividend to shareholders, representing 40 to 50% of adjusted earnings over the business cycle. The interim dividend has been raised by 10% to 43.5p (2020: 39.5p);
- Acquire disruptive technologies** – to supplement organic growth, target a number of exciting technology acquisitions in existing and adjacent markets, with a focus on strengthening our Consumer Care business and expanding in Life Sciences; and

4. **Maintain an appropriate balance sheet and return excess capital** – maintain an appropriate balance sheet to meet future investment and trading requirements, 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. At 30 June 2021, the leverage ratio had reduced to 1.7x (31 December 2020: 1.8x).

We expect to continue with the current accelerated capital reinvestment programme for the remainder of 2021, given the strong demand environment and range of opportunities, particularly in Consumer Care and Life Sciences.

Closing net debt in the period was £866.3m (31 December 2020: £800.5m). The Group has a strong balance sheet, having completed its debt refinancing in 2019, with no material debt maturities falling due before 2023. As at 30 June 2021, the Group had committed funding in place of £1,228.2m, with undrawn long-term committed facilities of £305.5m and £104.8m in cash.

During the COVID-19 pandemic, we have monitored liquidity and covenant forecasts for potential impact 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 sufficient liquidity and financial covenant headroom. In the event, the first half of 2021 has traded well ahead of the base case scenario in both sales and profit terms.

Retirement benefits

The post-tax asset on retirement benefit plans at 30 June 2021, measured on an accounting valuation basis under IAS19, improved to £1.3m (31 December 2020: £25.3m liability), primarily due to higher discount rates. Cash funding of the various plans is driven by the schemes' ongoing actuarial valuations. The triennial actuarial valuation of the largest pension plan, the UK Croda Pension Scheme, was performed as at 30 September 2020 and indicated that the scheme was 101% funded on a technical provisions basis. Consequently, no deficit recovery plan is 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:** 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 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;
- **Return on sales:** this is adjusted operating profit divided by sales, in 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 for EBITDA from acquisitions or disposals in the last 12 month period. EBITDA is adjusted operating profit plus depreciation and amortisation;
- **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

Significant improvement in Consumer Care

Following a disappointing two years for sales growth, the first half year for Consumer Care targeted a continued recovery in sales and underlying margin in Personal Care and progress with the integration of Iberchem, without disrupting its track record of sales growth and profitability. These have both been achieved. Personal Care delivered underlying sales growth of 19%, with first half sales 8% ahead of pre-pandemic levels for the same period in 2019. Growth was strongest in the 'high end', IP-rich products, benefitting mix and margin. Underlying Iberchem sales grew by 12% and profit was in line with the acquisition plan.

Sales were stronger, increasing by 46% to £367.0m (2020*: £251.1m). Underlying sales grew by 18%, a significant recovery after the challenges of COVID-19 lockdowns in 2020. Acquisitions added 38% (at constant currency) and currency translation was adverse by 10%. Within underlying growth, price/mix increased by 7%, reflecting a better product mix and recovery of higher raw material costs, with volume 11% higher.

IFRS operating profit increased by 9% to £79.4m (2020*: £72.6m). Adjusted operating profit increased by 23% to £90.4m (2020*: £73.7m). Following a weaker product mix in the second half of last year, underlying margin in Personal Care improved. Return on sales for Consumer Care as a whole was 24.6% (2020*: 29.4%), reflecting the dilution impact from the lower margin acquired Iberchem business, together with an increased remuneration incentive charge.

Demand from Personal Care customers strengthened during the half year, particularly in luxury and premium markets. This benefitted our Beauty Actives business, the leading innovator in the global skin care market, which increased sales by 26%. Beauty Effects saw a progressive improvement in demand for its ingredients for sun care, cosmetics and hair care markets, growing sales by 11%, but remained constrained by the impact of continued lockdowns in some parts of Asia and Europe. Beauty Formulation had enjoyed resilient sales through pandemic lockdown, with its focus on 'at home' use products, but still delivered 8% growth as lockdowns eased. Innovation is focused on natural ingredients and biotechnology to meet growing consumer demand, with Beauty Actives launching Ameyezing™, a biodegradable product with its origins in wild ginger that improves the appearance of dark eye circles.

Iberchem, the global fragrances and flavours business which was acquired in November 2020, continued its excellent track record of organic growth, with a double-digit percentage sales increase to £85.1m. Return on sales was in line with the acquisition plan, despite some lag in recovery of raw material increases, and includes targeted investment in additional resource to deliver synergies. The integration of Iberchem, which has more than 80% of sales in emerging markets, is on track to deliver nearly €50m of annualised revenue synergies by 2025, principally through leveraging the combined global sales network. Integration has focused on realising these revenue synergies and helping to transition Iberchem's raw materials onto a more sustainable platform. Ten target countries have been identified for revenue synergies, including the United States and countries in Asia, leveraging Croda's sales team presence. In Brazil, a new Iberchem business and R&D laboratory have been established at the Croda site. With sustainability a potential differentiator in the fragrance and flavours market, Iberchem has launched new product lines that are Ecocert-accredited as environmentally friendly and socially conscious, as well as biodegradable.

After strong demand for hygiene products during 2020, Home Care sales growth slowed to 5% in the first half of 2021. Customer product relaunches using Croda's fabric care technology, together with progressive replacement of petrochemical products with bio-based surfactants, are expected to drive future growth.

Our strategy is to 'Strengthen to Grow' in Consumer Care, positioning the sector to capitalise on continued market fragmentation amongst our customer base and the accelerating demand for sustainable ingredients. This sustainability trend is driven by regulatory change and by increasing consumer demand for 'clean beauty' and products with a beneficial impact on wellbeing. The Consumer Care sector enables its customers to meet their sustainability commitments by leveraging Croda's leading position in renewable raw materials, through ethical sourcing and greater ingredient transparency, more sustainable manufacture and by focusing a greater proportion of innovation on sustainable ingredients. With these trends, Iberchem's superior growth profile and the potential of Home Care, we expect Consumer Care to achieve mid single digit percentage top line growth in the medium term at strong margins.

This strategy is supported by organic and inorganic investment and a robust innovation pipeline. Following significant investment in previous years, the US bio-based surfactants plant has been fully operational since March, enabling us to produce sustainable ingredients that deliver identical performance to petrochemical peers. We expect the plant to move from loss making to profit as new sales convert from petrochemical materials and with a planned change to cheaper bio-feedstock later in 2021.

Organic investment has been supported by the acquisition of two businesses which accelerate the transition to more natural raw materials, an important differentiator in Consumer Care markets. In March, we acquired botanicals specialist Alban Muller to expand our portfolio of natural ingredients within the Beauty Actives platform, for a total enterprise value of €25m. In June, we completed the acquisition of Parfex for a total enterprise value of €45m. This acquisition increases Iberchem's sustainable fragrance offerings and presence in fine fragrances, illustrating our appetite to invest to reinforce Iberchem's superior growth. NPP increased to 45% (2020: 42%) of sector sales, reflecting the improvement in business mix in Personal Care, a significant increase in Home Care, as well the inclusion of Iberchem sales.

Outstanding performance in Life Sciences

The first half year in Life Sciences has seen an outstanding Health Care performance, with rapid expansion in all patient health platforms and successful integration of the Avanti acquisition, coupled with good growth across Crop Care. The business is moving into higher value, lower volume niches, delivering essential functionality for customers' drug, vaccine and crop science applications. In addition to significant sales growth in existing platforms, Croda has been supporting an increasing number of emergency COVID-19 vaccine and drug applications by reprioritising resources, investing capital to expand innovation and manufacturing capacity, and finding new agile ways to solve urgent problems.

Sales growth was outstanding, increasing by 61% to £290.4m (2020*: £179.8m). Underlying sales grew by 47%, including 30 percentage points from scale-up of lipid systems at existing Croda sites for COVID-19 applications. Strong demand beyond these immediate applications drove a 17% increase in underlying sales in the balance of the Health Care and Crop Care businesses, demonstrating the breadth of sales growth across the Life Sciences portfolio. Alongside this, acquisition added 23% (at constant currency) and currency translation was adverse by 9%. Within underlying growth, the improvement in product mix was evident, with price/mix adding 42%, while volume increased by 6%.

IFRS operating profit increased by 98% to £105.1m (2020*: £53.2m). With the continued growth in higher value add niches, adjusted operating profit increased by 98% to £114.2m (2020*: £57.8m), improving return on sales to 39.3% (2020*: 32.1%).

To achieve this level of sales and profit growth in such a short period has placed significant demands on the business, our manufacturing capability and our people. To meet COVID-19 related demand, we have redeployed resource to our US and UK sites, including transferring 20 specialist staff from around the world under special travel protocols to Avanti's US operation. We have invested rapidly in capacity to maximise available product for our customers, who are meeting the urgent needs of the world with vaccine and drug solutions. Over time, we expect growth rates and margin to moderate, as we bring new capacity on stream to refine and expand the manufacturing process and emergency COVID-19 demand normalises. In June, Avanti was recognised for its significant contribution to fighting the COVID-19 pandemic with the Societal Contribution Award from the American Chemistry Council.

The leading area of COVID-19 application has used Avanti's proprietary lipid systems technology. Across Avanti and other Croda sites involved in the scale-up of production, lipid systems sales in the first half year exceeded US\$100m. We now expect full year 2021 lipid system sales to reach at least US\$200m, an increase from our previous guidance of US\$125m. While the majority of sales are to our principal COVID-19 vaccine contract, over time we expect other drug and vaccine applications of lipids to progressively grow and the customer base to broaden.

The broader Health Care business saw excellent underlying growth across its patient health technologies. We are also working on more than 100 COVID-19 projects across all three drug delivery platforms, the majority of which utilise our vaccine adjuvant technologies, in addition to our expertise in speciality excipients and lipid systems. These three platforms saw excellent progress in the first half year:

- Sales of speciality excipients grew by more than two thirds, driven by the expansion in injectable drugs using biologic actives and the doubling of our US manufacturing capacity through the commissioning of a £30m capital investment;
- Vaccine adjuvant sales grew by more than two thirds, driven by demand for COVID-19 and other vaccines. This builds on the 2018 acquisition of Biosector, a leading supplier of adjuvants which help trigger the body's immune response; and
- Lipid systems offer significant potential beyond COVID-19 for a wide variety of future mRNA and gene therapy applications. Whilst a small number of competitors are entering the multi-billion dollar potential market, our first-mover advantage and market leading position, established through the Avanti acquisition, has been augmented by continued innovation and total capital investment of almost £40m.

In Crop Protection, we developed our position as innovation partner to agricultural customers, providing increasingly sustainable delivery systems to enable continued customer compliance in areas such as biodegradability. Both the Crop Protection and Seed Enhancement businesses delivered double-digit percentage underlying sales growth. Crop Protection saw some customer restocking and a positive external environment with higher commodity prices. Seed Enhancement is helping customers stay ahead of EU regulatory change on microplastics, with trials of microplastic-free seed coatings underway with both vegetable and field crop customers leading to the first commercial orders. The Seed Enhancement business delivered its highest growth in Latin America, where performance was augmented by the uptake of novel film coatings based on technology from elsewhere in Croda's portfolio.

Our strategy is to 'Expand to Grow' Life Sciences. With its growing margin and exciting technologies aligned to global patient health and crop sustainability trends, we will continue to build our Life Sciences brand as a high value add solution provider. This strategy is driven by innovation and investment, with a robust pipeline to expand the number of products in our speciality excipients portfolio and to develop the next generation of vaccine adjuvant and lipid technologies. NPP sales accounted for 29% of total sales (2020: 26%), or 51% when Avanti and lipid system sales are included. We are deploying more capital in the sector, both organically and through acquisition. We have commissioned our US speciality excipient expansion and are bringing new capacity in Avanti and lipid scale-up on line during the third quarter. This will be followed by further expansion in Health Care and Crop Care opportunities. We expect to deliver mid to high single digit percentage organic sales growth at attractive margins over the medium term, supplemented by further acquisition opportunities.

Performance Technologies recovering strongly

The first half year for Performance Technologies saw a continued improvement in sales, driven by a recovery in industrial markets and sustainability driven demand for multiple niche applications. Margins also improved due to a better business mix and operating leverage. Sales increased by 15% to £223.7m (2020*: £195.0m). Underlying sales grew by 21%, with Smart Materials leading the recovery, supported by a progressive recovery in demand in Energy Technologies. Price/mix increased 3%, principally reflecting higher raw material costs, while volumes were 18% higher. First half underlying sales for 2021 were 11% ahead of 2019, completing the recovery above pre-pandemic levels.

IFRS operating profit increased by 13% to £31.3m (2020*: £27.7m). Adjusted operating profit increased by 18% to £34.8m (2020*: £29.5m), reflecting the impact of higher sales, positive operating leverage and higher production volume. Return on sales recovered to 15.6% (2020*: 15.1%), a significant improvement on second half 2020 at 10.9%*, despite the impact of higher remuneration incentive costs.

Against a backdrop of rapid recovery in industrial and technology markets, as well as rising raw material costs, demand grew significantly across both businesses, accentuated by customer inventory build. Smart Materials built on its improved sales performance in 2020 with a further 18% increase in sales. This reflected continued strong demand for food packaging and protective equipment, a recovery in broader materials demand and growing customer requirements for sustainable solutions, such as biodegradable and recyclable polymers. After a slower start, Energy Technologies delivered a 10% increase in sales, as industrial demand returned, particularly in Asia. Demand has outpaced the broader recovery in mobility and end markets more generally, due to our exposure to higher growth traditional markets, as well as next generation applications such as electric vehicles.

In May, we announced a strategic review of the Performance Technologies and Industrial Chemicals ('PTIC') businesses to establish what ownership structure would best serve this part of Croda's business going forward, creating a stronger platform for its future growth, while allowing more capital to be deployed into the higher returning Consumer Care and Life Sciences businesses. PTIC is an excellent, world leading business, delivering industry leading margins across the cycle. It is also a highly integrated part of Croda with important mutual dependencies, so the focus of the strategic review to date has been on the practicalities of separation. We have now defined a perimeter and scope for those PTIC activities which can form the strongest possible portfolio as a separate business and are non-core to Consumer Care and Life Sciences. We have concluded that up to an equivalent of 75% of the revenue of the current PTIC portfolio could be included in the scope of any potential divestment and are now assessing how the full potential of these assets can best be delivered, with the review expected to conclude by the end of 2021.

The strategic review is consistent with the prioritisation of capital to the Consumer Care and Life Sciences sector and the 'refine to grow' strategy for Performance Technologies, through which we are transitioning the portfolio to focus on high-tech markets. We are also expanding our geographic footprint, opening a new innovation centre in Shanghai to drive our China growth by working collaboratively with customers on near term projects and tailoring longer term innovation projects to the needs of customers in China and North Asia. We are already seeing robust sales growth and progress towards our 20% margin target.

This strategy is driven by innovation and investment. Our innovation pipeline continues to expand, with NPP sales improving to 18% of total sector sales (2020: 17%). The Rewitec acquisition, whose additives repair damage to wind turbines, has delivered good growth and is now conducting trials with a major energy company, as well as investing to expand in China. Energy Technologies is applying its innovation to align to the sustainability driven transition of industrial markets; for example, we are working with global manufacturers to enhance drivetrain lubrication of electric vehicles, with excellent results seen in recent trials. Smart Materials will see completion of a £30m expansion project in the UK in 2021, expanding capacity and offering customers new technologies in high value polymers for lightweight and durable applications.

Industrial Chemicals

Industrial Chemicals activities continue to support the overall efficiency of Croda's three principal sectors. After a period of declining demand as we reengineered out of our processes a number of the by-products which have traditionally been sold by this sector, the upsurge in global industrial demand, together with higher commodity prices, saw sales 13% higher at £52.9m (2020: £47.0m). Underlying sales rose 18%. IFRS operating profit increased to £2.7m (2020: £0.5m) and adjusted operating profit was also £2.7m (2020: £0.6m).

Other matters

The principal risks and uncertainties facing the Group were set out on pages 44 to 48 of the Group's financial statements for the year ended 31 December 2020. There have been no changes in the Group's principal risks and uncertainties, risk management processes or policies since the year end, other than the expanding exposure to the increased risk of operating within pharmaceutical markets, following recent acquisitions, together with a new principal risk relating to our ability to execute significant strategic change objectives in parallel. The Group's principal risks as reported in the financial statements for the year ended 31 December 2020 were: revenue generation in established and emerging markets; product and technology innovation and protection; digital technology innovation; delivering sustainable solutions – Climate Positive; our people, culture, wellbeing, talent development and retention; product quality/liability claims; loss of significant manufacturing site; suppliers and raw material security; product stewardship and chemical regulatory compliance; ethics and compliance; security of business information and networks; and ineffective management of pension liabilities.

Related party transactions during the period are set out in note 11.

Statement of Directors' Responsibilities

The Directors confirm that this condensed interim financial information has been prepared in accordance with IAS 34 as adopted for use in the UK and that the interim management report includes a fair review of the information required by DTR 4.2.7 and DTR 4.2.8, namely:

- an indication of important events that have occurred during the first six months and their impact on the condensed set of financial statements, and a description of the principal risks and uncertainties for the remaining six months of the financial year; and
- material related party transactions in the first six months and any material changes in the related party transactions described in the last Annual Report.

The Directors of Croda International Plc at 30 June 2021 were as follows (a list of current Directors is maintained on the Croda website: www.croda.com):

Anita Frew (Chair)
Steve Foots (Group Chief Executive)
Roberto Cirillo
Jacqui Ferguson
Dr Helena Ganczakowski
Professor Keith Layden
Jez Maiden
John Ramsay

By order of the Board

Steve Foots
Group Chief Executive

Jez Maiden
Group Finance Director

Independent Review Report to Croda International Plc

Conclusion

We have been engaged by the Company to review the condensed set of financial statements in the half-year statement for the six months ended 30 June 2021 which comprises the Group condensed interim income statement, Group condensed interim statement of comprehensive income, Group condensed interim balance sheet, Group condensed interim statement of changes in equity, Group condensed interim statement of cash flows and the related explanatory notes.

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the half-year statement for the six months ended 30 June 2021 is not prepared, in all material respects, in accordance with IAS 34 *Interim Financial Reporting* as adopted for use in the UK and the Disclosure Guidance and Transparency Rules (“the DTR”) of the UK’s Financial Conduct Authority (“the UK FCA”).

Scope of review

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410 *Review of Interim Financial Information Performed by the Independent Auditor of the Entity* issued by the Auditing Practices Board for use in the UK. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. We read the other information contained in the half-year statement and consider whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Directors’ responsibilities

The half-year statement is the responsibility of, and has been approved by, the Directors. The Directors are responsible for preparing the half-year statement in accordance with the DTR of the UK FCA.

As disclosed in note 1, the latest annual financial statements of the Group were prepared in accordance with International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union and in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and the next annual financial statements will be prepared in accordance with UK-adopted international accounting standards. The Directors are responsible for preparing the condensed set of financial statements included in the half-year statement in accordance with IAS 34 as adopted for use in the UK.

Our responsibility

Our responsibility is to express to the Company a conclusion on the condensed set of financial statements in the half-year statement based on our review.

The purpose of our review and to whom we owe our responsibilities

This report is made solely to the Company in accordance with the terms of our engagement to assist the Company in meeting the requirements of the DTR of the UK FCA. Our review has been undertaken so that we might state to the Company those matters we are required to state to it in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company for our review work, for this report, or for the conclusions we have reached.

Ian Griffiths

for and on behalf of KPMG LLP

Chartered Accountants

15 Canada Square

London E14 5GL

26 July 2021

Croda International Plc

Interim announcement of trading results for the six months ended 30 June 2021

Group Condensed Interim Income Statement

	Note	First half 2021			First half 2020			Full year 2020		
		Adjusted £m	Adjustments £m	Reported Total £m	Adjusted £m	Adjustments £m	Reported Total £m	Adjusted £m	Adjustments £m	Reported Total £m
Revenue	2	934.0	–	934.0	672.9	–	672.9	1,390.3	–	1,390.3
Cost of sales		(463.5)	–	(463.5)	(362.4)	–	(362.4)	(758.2)	–	(758.2)
Gross profit		470.5	–	470.5	310.5	–	310.5	632.1	–	632.1
Operating costs		(228.4)	(23.6)	(252.0)	(148.9)	(7.6)	(156.5)	(312.5)	(29.6)	(342.1)
Operating profit	2	242.1	(23.6)	218.5	161.6	(7.6)	154.0	319.6	(29.6)	290.0
Financial costs	3	(12.9)	(1.8)	(14.7)	(9.2)	–	(9.2)	(19.5)	(1.5)	(21.0)
Financial income	3	0.3	–	0.3	0.1	–	0.1	0.5	–	0.5
Profit before tax		229.5	(25.4)	204.1	152.5	(7.6)	144.9	300.6	(31.1)	269.5
Tax		(56.0)	6.0	(50.0)	(38.1)	1.5	(36.6)	(72.4)	4.5	(67.9)
Profit after tax for the period		173.5	(19.4)	154.1	114.4	(6.1)	108.3	228.2	(26.6)	201.6
Attributable to:										
Non-controlling interests		0.7	–	0.7	0.1	–	0.1	–	–	–
Owners of the parent		172.8	(19.4)	153.4	114.3	(6.1)	108.2	228.2	(26.6)	201.6
		173.5	(19.4)	154.1	114.4	(6.1)	108.3	228.2	(26.6)	201.6

Adjustments relate to exceptional items, amortisation of intangible assets arising on acquisition and the tax thereon. Details are disclosed in note 2.

	Note	Pence		Pence Reported Total	Pence Adjusted	Pence Reported Total	Pence Adjusted	Pence Reported Total
		Adjusted	Reported Total					
Earnings per 10.61p ordinary share								
Basic		124.0	110.0	110.0	88.8	84.1	175.5	155.1
Diluted		123.7	109.8	109.8	88.7	84.0	175.3	154.8
Ordinary dividends paid in the period								
Interim	4		–	–		–		39.50
Final	4		51.50	51.50		50.50		50.50

Group Condensed Interim Statement of Comprehensive Income

	2021 First half £m	2020 First half £m	2020 Full year £m
Profit after tax for the period	154.1	108.3	201.6
Other comprehensive income/(expense):			
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
Remeasurements of post-retirement benefit obligations	40.5	58.7	51.3
Tax on items that will not be reclassified	(8.7)	(9.9)	(9.7)
	31.8	48.8	41.6
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Currency translation	(48.5)	30.4	(15.0)
Other comprehensive (expense)/income for the period	(16.7)	79.2	26.6
Total comprehensive income for the period	137.4	187.5	228.2
Attributable to:			
Non-controlling interests	0.6	0.5	0.1
Owners of the parent	136.8	187.0	228.1
	137.4	187.5	228.2
Arising from:			
Continuing operations	137.4	187.5	228.2

Group Condensed Interim Balance Sheet

	Note	At 30 June 2021 £m	At 31 December 2020 £m
Assets			
<i>Non-current assets</i>			
Intangible assets		1,305.1	1,311.7
Property, plant and equipment	5	940.7	900.8
Right of use assets	6	80.7	80.1
Investments		3.3	5.2
Deferred tax assets		16.8	14.5
Retirement benefit assets	8	30.0	17.6
		2,376.6	2,329.9
<i>Current assets</i>			
Inventories		361.0	302.6
Trade and other receivables		365.6	289.9
Cash and cash equivalents		104.8	106.5
		831.4	699.0
Liabilities			
<i>Current liabilities</i>			
Trade and other payables		(296.1)	(240.5)
Borrowings and other financial liabilities		(61.9)	(49.1)
Lease liabilities		(11.5)	(10.7)
Provisions	8	(4.3)	(6.7)
Current tax liabilities		(45.4)	(38.4)
		(419.2)	(345.4)
Net current assets		412.2	353.6
<i>Non-current liabilities</i>			
Borrowings and other financial liabilities		(826.4)	(776.2)
Lease liabilities		(71.3)	(71.0)
Other payables		(25.8)	(27.1)
Retirement benefit liabilities	8	(28.2)	(49.9)
Provisions	8	(4.3)	(3.9)
Deferred tax liabilities		(168.3)	(160.3)
		(1,124.3)	(1,088.4)
Net assets		1,664.5	1,595.1
Equity			
Equity attributable to owners of the parent		1,653.0	1,585.8
Non-controlling interests in equity		11.5	9.3
Total equity		1,664.5	1,595.1

Group Condensed Interim Statement of Changes in Equity

	Note	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Non-controlling interests £m	Total equity £m
At 1 January 2020		15.1	93.3	34.4	718.8	7.0	868.6
Profit after tax for the period		–	–	–	108.2	0.1	108.3
Other comprehensive income		–	–	30.0	48.8	0.4	79.2
Total comprehensive income for the period		–	–	30.0	157.0	0.5	187.5
Transactions with owners:							
Dividends on equity shares	4	–	–	–	(65.0)	–	(65.0)
Share-based payments		–	–	–	1.0	–	1.0
Transactions in own shares		–	–	–	(9.1)	–	(9.1)
Total transactions with owners		–	–	–	(73.1)	–	(73.1)
Total equity at 30 June 2020		15.1	93.3	64.4	802.7	7.5	983.0
At 1 January 2021		16.2	707.7	19.3	842.6	9.3	1,595.1
Profit after tax for the period		–	–	–	153.4	0.7	154.1
Other comprehensive (expense)/income		–	–	(48.4)	31.8	(0.1)	(16.7)
Total comprehensive (expense)/income for the period		–	–	(48.4)	185.2	0.6	137.4
Transactions with owners:							
Dividends on equity shares	4	–	–	–	(71.8)	–	(71.8)
Share-based payments		–	–	–	7.0	–	7.0
Transactions in own shares		–	–	–	(4.8)	–	(4.8)
Total transactions with owners		–	–	–	(69.6)	–	(69.6)
Acquisition of a subsidiary with an NCI		–	–	–	–	1.6	1.6
Total equity at 30 June 2021		16.2	707.7	(29.1)	958.2	11.5	1,664.5

Other reserves include the Capital Redemption Reserve of £0.9m (30 June 2020: £0.9m) and the Translation Reserve of £(30.0)m (30 June 2020: £63.5m).

Group Condensed Interim Statement of Cash Flows

	Note	2021 First half £m	2020 First half £m	2020 Full year £m
Cash flows from operating activities				
Operating profit		218.5	154.0	290.0
Adjustments for:				
Depreciation and amortisation		55.0	36.7	81.8
Fair value movement on contingent consideration		3.1	–	–
Impairment		–	–	1.4
Loss/(Profit) on disposal of property, plant and equipment		0.1	(0.1)	–
Net provisions charged		0.4	1.7	4.2
Share-based payments		13.8	2.6	4.1
Non-cash pension expense		6.1	4.3	7.7
Share of loss of associate		1.8	0.5	1.1
Cash paid against operating provisions		(1.5)	(4.8)	(7.8)
Movement in inventories		(58.7)	(20.6)	(7.0)
Movement in receivables		(76.5)	(9.9)	(15.6)
Movement in payables		36.8	16.9	15.3
Cash generated from operating activities		198.9	181.3	375.2
Interest paid		(8.3)	(8.8)	(17.5)
Tax paid		(48.9)	(39.5)	(70.7)
Net cash generated from operating activities		141.7	133.0	287.0
Cash flows from investing activities				
Acquisition of subsidiaries, net of cash acquired		(55.5)	–	(868.2)
Acquisition of associates and other investments		–	–	(1.5)
Purchase of property, plant and equipment		(78.7)	(48.2)	(115.0)
Purchase of other intangible assets		(3.1)	(2.9)	(6.2)
Proceeds from sale of property, plant and equipment		0.2	0.2	0.2
Cash paid against non-operating provisions		(0.7)	(0.4)	(1.7)
Interest received		0.3	0.1	0.5
Net cash used in investing activities		(137.5)	(51.2)	(991.9)
Cash flows from financing activities				
New borrowings		194.4	171.1	438.7
Repayment of borrowings		(116.9)	(188.2)	(201.4)
Payment of lease liabilities		(6.8)	(4.9)	(7.6)
Issue of ordinary shares		–	–	615.5
Net transactions in own shares		(4.8)	(9.1)	(6.9)
Dividends paid to equity shareholders	4	(71.8)	(65.0)	(115.9)
Net cash used in financing activities		(5.9)	(96.1)	722.4
Net movement in cash and cash equivalents		(1.7)	(14.3)	17.5
Cash and cash equivalents brought forward		77.8	63.1	63.1
Exchange differences		4.4	2.3	(2.8)
Cash and cash equivalents carried forward		80.5	51.1	77.8
Cash and cash equivalents carried forward comprise:				
Cash at bank and in hand		104.8	61.1	106.5
Bank overdrafts		(24.3)	(10.0)	(28.7)
		80.5	51.1	77.8

A reconciliation of the cash flows above to the movements in net debt is shown in note 7.

Notes to the Interim Financial Statements

1. a. General information

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. This consolidated interim report was approved for issue on 26 July 2021. The financial information included in this interim financial report for the six months ended 30 June 2021 does not constitute statutory accounts as defined in section 434 of the Companies Act 2006 and is unaudited. The comparative information for the six months ended 30 June 2020 is also unaudited. The comparative figures for the year ended 31 December 2020 have been extracted from the Group's financial statements, as filed with the Registrar of Companies, on which the auditors gave an unqualified opinion, did not contain an emphasis of matter paragraph and did not make a statement under section 498 of the Companies Act 2006. These Group condensed interim financial statements have been reviewed, not audited.

b. Basis of preparation

This consolidated interim financial report for the six months ended 30 June 2021 has been prepared in accordance with IAS 34 *Interim Financial Reporting* as adopted for use in the UK.

Tax charged within the six months ended 30 June 2021 has been calculated by applying the effective rate of tax which is expected to apply, on a jurisdiction by jurisdiction basis, to the Group for the period ending 31 December 2021 using rates substantively enacted by 30 June 2021 as required by IAS 34 'Interim Financial Reporting'. Legislation to increase the UK standard rate of corporation tax from 19% to 25% was substantively enacted on the 24 May 2021, effective from 1 April 2023. The calculation of deferred tax balances have been revised accordingly however the impact on the Group is immaterial.

The annual financial statements of the Group for the year ended 31 December 2021 will be prepared in accordance with UK-adopted international accounting standards. As required by the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority, the condensed set of financial statements has been prepared applying the accounting policies and presentation that were applied in the preparation of the company's published consolidated financial statements for the year ended 31 December 2020, which were prepared in accordance with the requirements of the Companies Act 2006 ("Adopted IFRSs") and prepared in accordance with international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union.

Going concern basis

The ongoing impact of COVID-19, and the broader consequences on the markets in which the Group operates has been considered in the preparation of the condensed consolidated interim financial statements including within our evaluation of critical accounting estimates and judgements which are detailed further in note 8. The condensed consolidated financial statements are prepared on a going concern basis which the directors believe to be appropriate for the following reasons:

The Group's existing Club facility has a maturity date of October 2025. At 30 June 2021 the Group had £1,228.2m of committed debt facilities available from its banking group, USPP bondholders and lease providers, with principal maturities between 2023 and 2030, of which £305.5m (30 June 2020: £470.2m) was undrawn, together with cash balances of £104.8m (30 June 2020: £61.1m). Net cash generated from operating activities in the six month period was £141.7m (30 June 2020: £133.0m).

The Directors have reviewed updated liquidity and covenant forecasts for the Group. 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 condensed consolidated interim financial statements. These sensitivities include a severe but plausible downside scenario alongside an additional scenario considered to be severe but remote. Relative to the base case scenario, the sensitivities assume an increasingly pessimistic outlook for global economic demand, coupled with slower economic recoveries. Specifically, the severe but remote scenario assumes demand falls below average 2020 levels for the remainder of 2021 and all of 2022. Furthermore, both downside scenarios assume a material increase in working capital, due to inventory build and higher customer receivables, and substantial margin erosion, predicated on a deterioration in the economic conditions.

In both downside scenarios, throughout the period under assessment, the Group continues to have sufficient liquidity headroom and sufficient financial covenant headroom under its debt facilities. The Directors are satisfied that the Group has sufficient resources to continue in operation for the foreseeable future, which is a period of not less than 12 months from the date of this report.

b. Basis of preparation continued

In May 2021, the Group announced a strategic review of its Performance Technologies & Industrial Chemicals businesses, representing a material component of the Group's current trading. As at the date of approving the condensed consolidated interim financial statements the review has not been completed; however, the Directors have considered the potential outcomes and are satisfied that these would have no significant impact on the Group's ability to continue operating for a period of not less than 12 months from the date of approval of this report.

Accordingly, the condensed consolidated interim financial statements have been prepared on a going concern basis.

c. Accounting policies

The accounting policies applied in these interim financial statements are the same as those applied in the Group's financial statements for the year ended 31 December 2020.

Other matters

For details on the principal risks and uncertainties facing the Group refer to note 10. For information on related party transactions during the period refer to note 11.

2. Segmental information

The Group's sales, marketing and research activities are organised into four global market sectors, being Consumer 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.

There are no significant seasonal variations which impact the split of revenue between the first and second half of the financial year.

Adjustments

	2021 First half £m	2020 First half £m	2020 Full year £m
Exceptional items – operating profit			
Business acquisition and disposal costs	(3.7)	(1.0)	(11.7)
Redundancy, restructuring and impairments	–	(1.7)	(4.3)
Fair value movement on contingent consideration	(3.1)	–	–
Exceptional items – financial costs			
Unwind of discount on contingent consideration	(1.8)	–	(1.5)
Exceptional items	(8.6)	(2.7)	(17.5)
Amortisation of intangible assets arising on acquisition	(16.8)	(4.9)	(13.6)
Total adjustments	(25.4)	(7.6)	(31.1)

The exceptional items in the current year reflects discount unwind and fair value adjustment both in respect of contingent consideration, acquisition costs and fees incurred in preparation of the potential disposal of part of the PTIC business. Movements in contingent consideration have been presented as exceptional as they are not directly representative of the underlying business performance in the period, and therefore this presentation provides a meaningful basis to make comparisons between reporting periods. Business acquisition and disposal costs have been presented as exceptional due to their size and one-off nature. The exceptional items in the prior year related to the delivery of cost saving actions announced in the 2019 full year results and acquisition costs. The adjustments to operating profit relate to our segments as follows: Consumer Care £11.0m (30 June 2020: £1.1m), Life Sciences £9.1m (30 June 2020: £4.6m), Performance Technologies £3.5m (30 June 2020: £1.8m) and Industrial Chemicals £Nil (30 June 2020: £0.1m).

2. Segmental information continued

	2021 First half £m	2020 Restated First half £m	2020 Restated Full year £m
Income statement			
Revenue			
Consumer Care	367.0	251.1	527.8
Life Sciences	290.4	179.8	392.5
Performance Technologies	223.7	195.0	373.6
Industrial Chemicals	52.9	47.0	96.4
Total Group revenue	934.0	672.9	1,390.3
Adjusted operating profit			
Consumer Care	90.4	73.7	146.5
Life Sciences	114.2	57.8	124.5
Performance Technologies	34.8	29.5	48.9
Industrial Chemicals	2.7	0.6	(0.3)
Total Group operating profit (before exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition)	242.1	161.6	319.6
Exceptional items and amortisation of intangible assets arising on acquisition	(23.6)	(7.6)	(29.6)
Total Group operating profit	218.5	154.0	290.0

As announced in the 2020 Annual Report the Group has revised the composition of its operating segments. Accordingly, the Group has restated the previously reported segment information for the six months ended 30 June 2020 and as at 31 December 2020.

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 £m	North America £m	Latin America £m	Asia £m	Reported Total £m
Revenue					
First half 2021					
Consumer Care	151.4	96.7	33.0	85.9	367.0
Life Sciences	140.3	83.1	28.8	38.2	290.4
Performance Technologies	110.8	50.3	11.2	51.4	223.7
Industrial Chemicals	24.1	5.9	1.1	21.8	52.9
Total Group revenue	426.6	236.0	74.1	197.3	934.0
Revenue					
First half 2020					
Consumer Care	85.0	82.0	25.3	58.8	251.1
Life Sciences	74.9	51.5	24.0	29.4	179.8
Performance Technologies	94.8	48.3	10.7	41.2	195.0
Industrial Chemicals	21.7	6.2	0.9	18.2	47.0
Total Group revenue	276.4	188.0	60.9	147.6	672.9

3. Net financial costs

	2021 First half £m	2020 First half £m	2020 Full year £m
Financial costs			
Bank interest payable	(9.2)	(8.1)	(16.8)
Net interest on retirement benefit liabilities	(0.1)	(0.6)	(1.2)
Interest on lease liabilities	(1.1)	(0.5)	(1.5)
Provision against non-operating loan	(2.5)	–	–
Unwind of discount on contingent consideration (exceptional item)	(1.8)	–	(1.5)
	(14.7)	(9.2)	(21.0)
Financial income			
Bank interest receivable and similar income	0.3	0.1	0.5
Net financial costs	(14.4)	(9.1)	(20.5)

4. Dividends paid

	Pence per share	2021 First half £m	2020 First half £m	2020 Full year £m
Ordinary				
2019 final, paid May 2020	50.50	–	65.0	65.0
2020 interim, paid October 2020	39.50	–	–	50.8
2020 final, paid June 2021	51.50	71.8	–	–
		71.8	65.0	115.8
Preference (paid June and December)		0.0	0.0	0.1
		71.8	65.0	115.9

An interim dividend in respect of 2021 of 43.50p per share, amounting to a total dividend of £60.7m, was declared by the Directors at their meeting on 26 July 2021. This interim report does not reflect the 2021 interim dividend payable. The dividend will be paid on 5 October 2021 to shareholders registered on 10 September 2021.

5. Property, plant and equipment

	2021 First half £m	2020 First half £m	2020 Full year £m
Opening net book amount	900.8	805.2	805.2
Exchange differences	(20.3)	38.1	(13.1)
Additions	78.7	48.2	115.0
Acquisitions	13.0	–	50.9
Disposals, write offs and reclassifications	(0.8)	(0.3)	(0.6)
Depreciation charge for the period	(30.7)	(25.8)	(55.5)
Impairments	–	–	(1.1)
Closing net book amount	940.7	865.4	900.8

At 30 June 2021 the Group had contracted capital expenditure commitments of £35.0m (30 June 2020: £57.6m).

6. Right of use assets

	2021 First half £m	2020 First half £m	2020 Full year £m
Opening net book amount	80.1	46.2	46.2
Exchange differences	(1.6)	2.0	(1.7)
Additions	7.4	17.4	43.8
Acquisitions	1.3	–	2.5
Remeasurements	0.1	0.5	0.4
Other disposals and write offs	(0.4)	(0.1)	(0.2)
Depreciation charge for the period	(6.2)	(5.0)	(10.6)
Impairments	–	–	(0.3)
Closing net book amount	80.7	61.0	80.1

7. Reconciliation to net debt

	2021 First half £m	2020 First half £m	2020 Full year £m
Net movement in cash and cash equivalents	(1.7)	(14.3)	17.5
Net movement in borrowings and other financial liabilities	(70.7)	22.0	(229.7)
Change in net debt from cash flows	(72.4)	7.7	(212.2)
Non-cash movement in lease liabilities	(9.5)	(18.3)	(47.8)
Exchange differences	16.1	(18.8)	7.2
	(65.8)	(29.4)	(252.8)
Net debt brought forward	(800.5)	(547.7)	(547.7)
Net debt carried forward	(866.3)	(577.1)	(800.5)

8. 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 judgements required when preparing the Group's accounts are 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 9 unless the possibility of a loss arising is considered remote.

At 30 June 2021, the Group has an environmental provision of £5.6m (31 December 2020: £6.3m) 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. 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. Whilst the assumptions have been updated as at 30 June 2021, the sensitivity of the defined benefit obligation to changes in the significant assumptions remains broadly unchanged from those disclosed in the Group's financial statements for the year ended 31 December 2020. Total Group net retirement benefit liabilities have decreased by £34.1m in the first half of 2021 to a £1.8m asset position. This movement comprises £6.1m of service costs in excess of contributions, £0.1m of net financial costs and £0.9m increase from acquisitions offset by £0.7m of currency translation gains and £40.5m of net actuarial gains.

Goodwill and fair value of assets acquired

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. Examples of such triggering events include a major change in market conditions or technology, or underperformance against financial forecasts. In performing its impairment analysis, the Group takes into consideration these indicators including the difference between its market capitalisation and net assets. 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

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

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 CGUs that are 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.

9. Contingent liabilities

The Group is subject to various claims which arise from time to time in the course of its business including, for example, in relation to commercial matters, product quality or liability, employee matters and tax audits.

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

10. 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.

The condensed interim financial statements do not include all financial risk management information and disclosures required in the annual financial statements; they should be read in conjunction with the Group's financial statements for the year ended 31 December 2020. There have been no changes in the Group's risk management processes or policies since the year end. With new acquisitions and the move into new market areas, the Group recognises the increased risks of operating within pharma markets, together with a new principal risk relating to capacity to execute significant strategic change objectives in parallel.

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.

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 contingent 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

10. Financial instruments continued

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 First half 2021 £m	Fair value First half 2021 £m	Book value Full year 2020 £m	Fair value Full year 2020 £m
US\$100m 3.75% fixed rate 10 year note	(71.9)	(78.0)	(73.2)	(82.9)
€30m 1.08% fixed rate 7 year note	(25.8)	(26.2)	(26.9)	(27.5)
€70m 1.43% fixed rate 10 year note	(60.1)	(63.4)	(62.7)	(67.0)
£30m 2.54% fixed rate 7 year note	(30.0)	(30.6)	(30.0)	(30.9)
£70m 2.80% fixed rate 10 year note	(70.0)	(73.4)	(70.0)	(75.2)
€50m 1.18% fixed rate 8 year note	(42.9)	(44.9)	(44.8)	(47.5)
£65m 2.46% fixed rate 8 year note	(65.0)	(66.9)	(65.0)	(68.9)
US\$60m 3.70% fixed rate 10 year note	(43.1)	(46.9)	(43.9)	(49.9)

11. Related party transactions

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

12. Business combinations

On 2 March 2021, the Group acquired the worldwide business activities of Alban Muller including 100% of the shares and voting interests of Acallmi for a total consideration of £16m. Established in France and employing 90 people, Alban Muller specialises in eco-responsible solutions to developing innovative botanical extracts, natural formulation ingredients and natural organic cosmetics. The company is an excellent fit for Croda's Beauty Actives business (part of the Consumer Care sector) and provides Croda with access to innovative technology in the botanicals market.

On 1 June 2021, the Group acquired a 96% majority shareholding in Parfex S.A. ('Parfex'), a fine fragrance business based in Grasse, France for a total consideration of £35.6m. Employing 75 people, Parfex creates fragrances principally for premium personal care and fine perfumery markets, leveraging the natural raw materials that are available in the region. The company will form part of the newly created Fragrances & Flavours business (part of the Consumer Care sector) alongside Iberchem acquired in November 2020.

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. The assessments are provisional given the proximity of the acquisitions to the period end date.

	Alban Muller £m	Parfex £m
Cash consideration	16.0	35.6
Fair value of assets and liabilities acquired		
Intangible assets	8.9	19.5
Property, plant & equipment	7.1	5.9
Right of use assets	1.2	0.1
Working capital and net debt	(4.2)	4.7
Retirement benefit liabilities	(0.4)	(0.5)
Deferred tax	(3.0)	(5.9)
Total identifiable net assets	9.6	23.8
Fair value of NCI	–	(1.6)
Goodwill	6.4	13.4

During the period, the Group completed the fair value reviews relating to the 2020 acquisitions. These reviews did not identify any changes to the asset base or goodwill.