

Press Release

25 July 2023

Results for the six months ended 30 June 2023

Continued investment and strategic progress despite a challenging environment

Croda International Plc (“Croda” or the “Group”) announces its half year results for the six months ended 30 June 2023.

Highlights

Half year ended 30 June	Statutory results (IFRS)			Adjusted results			Pro forma estimates*	
	2023	2022	change	2023	2022	change	2022 pro forma	Pro forma change
Sales (£m)	880.9	1,127.3	(21.9)%	880.9	1,127.3	(21.9)%	936	(6)%
Operating profit (£m)	130.2	288.6	(54.9)%	175.8	300.4	(41.5)%	261	(33)%
Operating margin (%)				20.0	26.6	(6.6)ppts	28	(8)ppts
Profit before tax (£m)	128.7	636.5	(79.8)%	174.3	288.8	(39.6)%	256	(32)%
Basic earnings per share (p)	63.1	389.6	(83.8)%	92.9	155.2	(40.1)%		
Ordinary dividend per share (p)	47.0	47.0	0%					
Free cash flow (£m)				76.4	21.1	262.1%		
Net debt (£m)				349.3	331.3	(5.4)%		

Pro forma H122 estimated results* have been adjusted for the divestment of the majority of Performance Technologies and Industrial Specialities (PTIC) on 30 June 2022

Group performance in line with revised June 2023 expectations; full year 2023 guidance reaffirmed

- **Pro forma sales down 6% as customers reduce inventory levels in consumer, crop, and industrial markets**
 - Flat sales in Consumer Care, against a strong prior period
 - Sales up 8% in Life Sciences, excluding \$62m prior period Covid-19 lipid sales
 - Sales fell 20% in Industrial Specialities, after adjusting for the PTIC divestment in the prior period
- **£128.7m IFRS profit before tax (H122: £636.5m); prior period benefiting from £360.6m divestment profit**
- **Adjusted profit before tax £174.3m (H122 pro forma (pf): £256m)**
 - 20.0% operating margin (H122 pf: 28%), impacted by lower volumes and phasing of Covid-19 lipid sales
 - Temporary cost measures introduced to protect profitability
- **Improved free cash flow; lower working capital outflow more than offsetting lower profit and higher capex**
- **Interim dividend maintained at 47.0p (H122: 47.0p), reflecting confidence in future performance**

Sector performance benefiting from diversification across seven growth businesses

- **Continued sequential improvement in Consumer Care with sales volumes up 8% vs H222**
 - Sales of new and protected products (NPP) remain strong at 40% of total sales (H122: 40%)
 - Sales up slightly in Beauty Actives with positive mix; volume improvement strongest in Beauty Care
 - 20% sales growth in F&F; driving synergies and Croda-enabled growth
- **Continued progress across Life Sciences**
 - Good sales growth in Seed Enhancement and Pharma, excluding prior period Covid-19 lipid sales
 - Crop Protection grew sales but experienced rapid destocking in Q2
 - Covid-19 lipid shipments still expected in Q4; supporting growing pipeline of other nucleic acid drugs
- **Lower Industrial Specialities sales and operating margin reflecting destocking and reduced demand**

Continued investment and strategic progress

- **Leveraging strong balance sheet to invest in fast-growing niches**
 - Investing in innovation in Asia with new R&D labs in Shanghai, China and Hyderabad, India
 - Partnering to access critical technology and scaling up Pharma; new capacity on-stream in 2025
 - Completed KRW350bn (c£232m) Solus Biotech acquisition on 4 July 2023, adding biotech-derived actives
- **'Doing the basics brilliantly' programme to drive ongoing efficiencies**
 - Improving employee productivity and responsiveness by simplifying operating processes
 - Continuing to enhance customer experience with new online order portal and self-serve data

Sales	2023 £m	Price/mix	Volume	Currency	Change	2022 £m
Consumer Care	455.6	10.2%	(13.7)%	3.7%	0.2%	454.9
Life Sciences	303.2	(2.6)%	(8.8)%	3.4%	(8.0)%	329.7
Industrial Specialties	122.1	(0.4)%	(65.0)%	1.0%	(64.4)%	342.7
Group	880.9	15.3%	(40.0)%	2.7%	(21.9)%	1,127.3
Estimated pro forma sales						
Group	881	15%	(40)%	3%	(22)%	1,127
Pro forma adjustment						(191)
Group (pro forma)	881	9%	(18)%	3%	(6)%	936

Adjusted profit	2023 £m	Constant currency change £m	Currency impact £m	2022 £m	Change
Consumer Care	95.2	(28.0)	2.1	121.1	(21.4)%
Life Sciences	72.3	(47.9)	1.4	118.8	(39.1)%
Industrial Specialties	8.3	(52.0)	(0.2)	60.5	(86.3)%
Operating profit	175.8	(127.9)	3.3	300.4	(41.5)%
Net interest	(1.5)			(11.6)	87.1%
Profit before tax	174.3			288.8	(39.6)%

Estimated pro forma profit	2023 £m	2022 £m	Change
Operating profit	176	300	(42)%
Pro forma adjustment	-	(39)	
Operating profit (pro forma)	176	261	(33)%
Net interest	(2)	(5)	60%
Profit before tax (pro forma)	174	256	(32)%

Steve Foots, Chief Executive Officer, commented:

"The speed and scale of the post-Covid stocking and subsequent destocking has been unprecedented, leading to a decline in first half sales volume and also impacting profit margin. Despite this difficult market backdrop, it is testament to the strength of the Croda business that Consumer Care delivered sequential improvement on the second half of 2022, driven by customer demand for innovation and sustainability. Excluding the impact of Covid-19 lipid sales in the prior period, we also saw growth across all areas of Life Sciences. With continued low visibility, we are taking some actions to protect profitability ahead of conditions returning to normal, while continuing to leverage our strong balance sheet to invest in future growth. The confidence we have in Croda's strategy is undiminished and the opportunities ahead remain very exciting for our business."

Outlook

With customer destocking in Consumer Care, Crop Protection and Industrial Specialties continuing into the second half of the year, we continue to expect full year 2023 Group adjusted profit before tax to be between £370m and £400m. We will leverage our strong balance sheet to sustain ongoing investment in our repositioned portfolio, focused on fast-growing niches, to create significant future value.

Further information:

An analyst presentation will be available via webcast at 0900 BST on 25 July 2023 at www.croda.com/investors.

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Notes:

All comparisons are with the 2022 first half year, unless otherwise stated.

Alternative Performance Measures (APMs): We use a number of APMs to assist in presenting information in this statement. We use such measures consistently at the half year and full year, and reconcile them as appropriate. Whilst the Board believes the APMs used provide a meaningful basis upon which to analyse the Group's financial performance and position, which is helpful to the reader, it notes that APMs have certain limitations, including the exclusion of significant recurring items, and may not be directly comparable with similarly titled measures presented by other companies.

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. Constant currency results are the primary measure used by management to monitor the performance of overseas business units, since they remove the impact of currency translation into Sterling, the Group's reporting currency, over which those overseas units have no control. Constant currency results are similarly useful to shareholders in understanding the performance of the Group excluding the impact of movements in currency translation over which the Group has no control. Constant currency results are reconciled to reported results in the review of financial performance below. The APMs are calculated as follows:
 - a. For constant currency profit, translation is performed using the entity reporting currency;
 - b. 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;
- **Pro forma results:** these reflect the current year performance measured against H1 2022 adjusted for the estimated impact of the divestment of the majority of Performance Technologies and Industrial Specialities on 30 June 2022. Given the divested business did not meet the requirements for classification as a discontinued operation, the first half of 2022 included the full PTIC business and the second half year only included the retained business. The Board believes that the pro forma information assists shareholders by providing a meaningful basis upon which to analyse business performance and make year-on-year comparisons. Pro forma analysis is used by management for budgeting and reporting purposes including the internal assessment of operating performance across the Group. In the first half of 2022, it is estimated that the divested operations contributed revenue of £191m, adjusted operating profit of £39m and adjusted profit before tax of £33m. Pro forma results are presented on a rounded basis due to the estimated nature of the measures. The level of estimation risk in arriving at the pro forma numbers is not considered material for the Group. Pro forma adjustments only impact Industrial Specialities and the Group, with no changes to Consumer Care or Life Sciences;
- **Adjusted results:** these are stated before exceptional items (as disclosed in the review of financial performance below) 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 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;
- **Operating margin or return on sales:** this is adjusted operating profit divided by sales, at reported currency. Management uses the measure to assess the profitability of each sector and the Group, as part of its drive to grow profit by more than sales value, in turn by more than sales volume, as set out in the Chief Executive's Review;
- **Return on invested capital (ROIC):** this is adjusted operating profit after tax divided by the average adjusted invested capital. Adjusted invested capital represents net assets adjusted for net debt, earlier goodwill written off to reserves and accumulated amortisation of acquired intangible assets. Calculations and reconciliations are provided in the five year record of the Group's Annual Report. The Board believes that ROIC is a key measure of efficient capital allocation, in line with its policy set, with its aim being to maintain a ROIC of two to three times the cost of capital over the cycle, and that it is useful to shareholders in assessing the superior returns delivered by the Group and the impact of deploying more capital to grow future returns faster;
- **Net debt:** comprises cash and cash equivalents (including bank overdrafts), current and non-current borrowings and lease liabilities. Management uses this measure to monitor debt funding levels and compliance with the Group's funding covenants which also use this measure. It believes that net debt is a helpful additional measure for shareholders in assessing the risk to equity holders and the capacity to invest more capital in the business;
- **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. Calculations and reconciliations are provided in the five year record of the Group's Annual Report. The Board monitors the leverage ratio against the Group's debt funding covenants and overall appetite for funding risk, in approving capital expenditure and acquisitions. It believes that the APM is a helpful additional measure for shareholders in assessing the risk to equity holders and the capacity to invest more capital in the business;
- **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. The Board uses free cash flow to monitor the Group's overall cash generation capability, to assess the ability of the Company to pay dividends and to finance future expansion, and, as such, it believes this is useful to shareholders in their assessment of the Group's performance.
- **New and Protected Products (NPP):** these are products which are protected by virtue of being either newly launched, protected by intellectual property or by unique quality characteristics. NPP is used by management to measure and assess the level of innovation across the Group.

Croda International Plc

Group Performance

We use a number of APMs to assist in presenting information in this statement which are defined on page 3. Pro forma H122 estimated results have been adjusted for the divestment of the majority of Performance Technologies and Industrial Chemicals (PTIC) on 30 June 2022.

Group performance impacted by market conditions; continued strategic progress

As previously disclosed, Croda's first half year performance was negatively impacted by a challenging environment with customers reducing their ingredient inventories in consumer care, crop and industrial end markets in most developed regions of the world. While it is normal for customer inventory levels to fluctuate, we have not previously seen the speed and scale of the rapid stocking that followed Covid-19 and subsequent destocking first experienced in North America a year ago.

Adjusting for the divestment of the majority of the Performance Technologies and Industrial Chemicals (PTIC) business on 30 June 2022, Group sales fell by 6% on a pro forma basis to £880.9m (H122 pro forma (pf): £936m). Pro forma constant currency sales fell by 9%, with price/mix 9% higher and volume 18% lower, with favourable foreign exchange rates adding 3%. Profit before tax (on an IFRS basis) was £128.7m (H122: £636.5m), the prior period having benefited from a profit of £360.6m on the divestment of the majority of PTIC. Adjusted profit before tax fell to £174.3m (H122 pf: £256m) as Group operating margin of 20.0% (H122 pf: 28%) was negatively impacted by the reduction in volumes, and the phasing of high-margin lipid sales to our principal vaccine customers due in the second half of 2023.

In this environment, we have implemented some temporary cost measures to protect profitability. This is supported by our existing 'doing the basics brilliantly' programme which aims to drive ongoing efficiencies. We are currently improving employee productivity and responsiveness by simplifying operating processes, and continuing to enhance customer experience with a new online order portal and self-serve data.

Our innovation pipelines remain robust, with customers continuing to invest in new product development. Across Consumer Care, sales of new and protected products (NPP) remain strong at 40% of total sales (H122: 40%). In Life Sciences, our focus on empowering biologics delivery is a key strategic driver of medium-term growth in both Pharma and Crop Care.

In Consumer Care, customers remain committed to sustainability and innovation, driving continued demand for Croda's R&D-led approach. Fastest growth is coming from sustainable ingredients including mineral sunscreens and sustainable hair care ingredients. The completion of the acquisition of Solus Biotech at the beginning of July added further fermentation-derived active ingredients into our portfolio, notably ceramides. Consumer Care has the deepest formulation science expertise and the broadest portfolio in the industry, with over 15,000 customer/product combinations in Beauty Actives and more than 23,000 combinations in Beauty Care. In addition, there are emerging opportunities for growth across Asia particularly for premium products. Our Fragrances and Flavours (F&F) business grew sales by 20%, reflecting its agile, cost competitive model and focus on emerging markets.

In Life Sciences, the move to biologics is the major technology trend with new mRNA vaccines expected to come to the market in the next two years, helping to drive accelerated growth in our Pharma business from 2025. Through execution of our strategy, we have established an industry-leading position in empowering biologics delivery, acquiring and entering partnerships with businesses with critical knowledge and technology, then building scale through capital expenditure in partnership with national governments, with new capacity due on stream in 2025. This approach has ensured our Pharma business has excellent competitive positioning focused on segments with the highest innovation needs and a broad, well diversified portfolio.

Across Consumer Care and Life Sciences, we are continuing to invest in our refocused portfolio to drive profitable growth, with disciplined returns metrics and a focus on improved cash generation. Organic capital expenditure was £76.1m (H122: £61.8m), and free cash flow improved to £76.4m (H122: £21.1m) with a lower working capital outflow of £9.7m (H122: £183.8m outflow) more than offsetting lower EBITDA and higher capital expenditure, the prior period having seen a significant increase in working capital due to inflation in raw materials and other costs.

Sector summary

Consumer Care – continued destocking; sequential performance improvement

In Consumer Care, first half performance improved sequentially compared with the second half of last year with volumes up 8%. However, customers have continued to reduce inventory levels and this industry trend continues to negatively impact volumes which were down 14% compared with the same period last year. Price/mix was up 10%, of which price increases implemented in 2022 contributed approximately six percentage points of the improvement, and improved mix, particularly in Beauty Actives, contributed approximately four percentage points. Positive price/mix and favourable foreign exchange rates, which added 4% in the first half year, meant sales were flat at £455.6m (H122: £454.9m).

IFRS operating profit was £79.2m (H122: £110.9m) and adjusted operating profit was £95.2m (H122: £121.1m). Consumer Care operating profit margin was 20.9% (H122: 26.6%), a small improvement on the second half of 2022 (18.9%) but below the first half of 2022 due to negative operating leverage from lower volumes.

Fragrances and Flavours (F&F) delivered 20% sales growth, or 16% at constant currency, benefiting from its emerging market exposure and agile, cost competitive positioning. F&F sales were up in all established regions, with the Middle East particularly strong. Delivery of sales synergies from the Iberchem acquisition continues, including a new multi-million pound a year sales opportunity to supply fragrances to a multinational company for premium hand wash products manufactured in regions where Iberchem has local production.

Other than F&F, the balance of Consumer Care experienced similar trends with favourable price/mix offsetting weaker volumes resulting in flat sales but at lower margins. Volume recovery has been strongest in Beauty Care albeit from a lower base. Encouragingly sales were up slightly in Beauty Actives as positive mix helped offset weaker volumes due to strong sales of Sederma's industry-leading portfolio of premium active ingredients.

The sequential improvement continued throughout the period with sales volumes in June higher than the monthly average for the first half year. Importantly, customers are continuing to invest in new product development and demand for innovation remains strong with continued strong sales of new and protected products.

Life Sciences – growth across all areas excluding prior period Covid-19 lipid sales

Life Sciences sales fell 8% to £303.2m (H122: £329.7m), the prior period having benefited from \$62m of lipid sales to our principal vaccine customers. Excluding this impact, sales increased 8%, comprising good sales growth in Pharma and Seed Enhancement, and more modest sales growth in Crop Protection. On a reported basis, price/mix decreased by 2%, while volume was 9% lower and currency translation added 3%.

IFRS operating profit was £63.6m (H122: £118.2m) and adjusted operating profit was £72.3m (H122: £118.8m). Life Sciences' operating profit margin of 23.8% (H122 36.0%) was negatively impacted by adverse mix including lower sales for Covid-19 applications in the Pharma business, which accounted for approximately eight percentage points of the margin decline, with negative operating leverage principally in Crop Protection accounting for approximately four percentage points.

The Pharma business delivered 8% sales growth, excluding prior period lipid sales to our principal vaccine customers. With applications spanning commercialised patented and generic drugs and vaccines, clinical trials and drug discovery, the business has a broad, well-diversified portfolio. Due to this attractive positioning, we have only seen a limited impact on performance from destocking and funding constraints for early-stage biotech businesses that are reported to have affected other companies. The Protein/Small Molecule Delivery platform performed well and will benefit from the addition of phospholipids from the Solus Biotech acquisition. Adjuvant Systems supports both commercialised vaccines and those in development; it will benefit from two new adjuvant partnerships agreed during the period. Our Nucleic Acid Delivery pipeline continues to develop well with Croda supporting more than half of nucleic acid drugs in clinical trials that specify a lipid delivery system. Shipments of lipid systems to our principal Covid vaccine customers are expected to occur as planned in the final quarter of 2023 benefiting sector operating profit margin in the second half year.

Following an exceptional 2022, when Crop Protection delivered both strong double-digit percentage volume growth and price/mix, the business started the year with good momentum, delivering positive volumes and flat pricing in the first quarter on a sequential basis. It began to experience rapid customer destocking in the second quarter, which was a factor originally expected to materialise more gradually later in the year, with volumes down more than 30% compared with Q1. Overall, the business grew sales in the half, with price increases and a favourable foreign exchange rate more than offsetting negative volume.

In the Seed Enhancement business, which is approximately one third of the size of Crop Protection, a significant proportion of sales are derived from providing enhancement services for vegetable seeds. As such, the business only sees a limited impact from stocking cycles and delivered an 18% sales increase in the first half year, driven by strong structural growth trends.

Industrial Specialties – performance reflecting destocking and lower global demand

With the divestment of the majority of Croda's Performance Technologies and Industrial Chemicals (PTIC) business on 30 June 2022, the retained industrials business, including the SIPO joint venture in China, has become the Industrial Specialties sector. Although the sector is not a priority for capital allocation and strategic growth, it plays an important role in our manufacturing model, supporting the Consumer Care and Life Sciences sectors on shared sites and operating a medium-term supply contract to the new owner of the divested business. The first half of 2022 included the full PTIC business and the second half year only the retained business. It is estimated that, had the divestment occurred at the start of 2022, sales in H122 would have been £191m lower at £152m and H122 adjusted operating profit would have been £39m lower at £22m. On this basis, sales fell 20% in the first half of this year to £122.1m principally due to lower volumes, reflecting destocking and weak industrial demand globally, and adjusted operating profit fell 62% to £8.3m as negative operating leverage compounded the impact of lower volumes. The impact of these adverse market conditions on the SIPO joint venture in China resulted in a goodwill impairment charge of £20.8m. Including the impairment charge, the reported IFRS loss was £12.6m (H122: £59.5m profit), with the prior period including the full contribution from the divested business.

Regional summary

Latin America grew sales in the period, driven by continued strength in Pharma, good momentum in Crop Protection and some recovery in Consumer Care volumes. Asia was negatively impacted by weak industrial demand but Consumer Care sales in the region grew high single digit percentage, reflecting Croda's strong positioning. North America remains weak, with Consumer Care impacted by destocking and some reduction in end-consumer demand. Whilst first half year Consumer Care sales and volumes in North America have remained significantly below the same period last year, order volumes in the region have improved progressively from the beginning of the year. Performance in Europe is tracking broadly in line with the Group, with the region beginning to see some destocking by Crop Protection customers in the period as well as Consumer Care.

Delivering our strategy

Strategy overview – leadership in sustainability and innovation

We combine leadership in sustainability with market-leading innovation with the objective of delivering profit growth ahead of sales growth, ahead of volume growth.

In line with our Purpose of using Smart science to improve lives™, we enable customers to realise their sustainability ambitions through the application of our innovation and the creation of sustainable ingredients. We are reinforcing our sustainability leadership by reducing the adverse impact of our operations, by replacing fossil-based ingredients with bio-based materials, reducing emissions, promoting biodiversity and ensuring our sourcing activities make a positive contribution to communities in our supply chains. Our sustainability leadership delivers benefits that are increasingly valued by our customers; for example, we are introducing a 'Scope 3 Index' of carbon footprint data for our ingredients incorporating the benefit of decarbonisation to 2030.

Innovation is at the heart of what we do, creating new market and technology niches. We have stepped up our rate of innovation through more external partnerships, for example with Amyris and BSI for sustainable vaccine adjuvants, and a focus on 'big bet' projects. This will support higher growth, improved mix and better margin as we become a more knowledge-intensive company, capturing more intellectual property. Even in the unprecedented market conditions that we have seen in the first half year, customers are continuing to invest in new product development, drawing on Croda's deep scientific expertise and application-focused innovation.

The foundation of our innovation model is internal R&D investment, applying the expertise of our scientists at our global innovation centres to meet customer needs. This is complemented by our open innovation network, providing access to universities and SMEs to help develop new intellectual property. We also invest externally in disruptive technologies, the benefits of which can be seen in recent product launches, such as the launch of an encapsulated retinol by our Beauty Actives business that leveraged expertise in encapsulation to improve efficacy.

Our 'big bet' projects are reinforcing our leadership in formulation science and harnessing the potential of biotech, alongside our conventional chemical technologies. We are sharing our expertise in chemistry, biotechnology and formulation science with customers through our new Formulation Academies.

Over the last three years, through the acquisitions and divestment we have made, we have successfully realigned our portfolio with faster growing niches in life science and consumer markets. We are implementing six strategic priorities to ensure our refocused portfolio delivers consistent top and bottom-line growth.

Six strategic priorities to deliver consistent top and bottom-line growth

Alongside our sector strategies of (1.) *'strengthening to grow'* Consumer Care and (2.) *'expanding to grow'* Life Sciences, we are (3.) *scaling biotech*, (4.) *exploring acquisition opportunities* to supplement organic capital deployment, (5.) *investing in*

fast growth in Asia, and (6.) improving our customer and employee experience through our *'doing the basics brilliantly'* programme.

Scaling biotech will transform our approach to sustainability, particularly in reducing customer Scope 3 carbon emissions. Projects are underway to develop bio-based fragrance ingredients, prioritising aroma chemicals which are used in a high proportion of our fragrance references. Our Beauty Care business is adding biotech-derived surfactants to our existing ECO range, and Beauty Actives is launching novel anti-ageing actives developed through collaboration between our biotech and high throughput screening centres in the UK, France and Canada. This is one example of how Croda is reinforcing its leadership in biotechnology, established over more than a decade in plant cell cultures and fermentation, and now being enhanced by investment in processing for scale up, biocatalysis and synthetic biology.

We are supplementing our organic investment with *acquisitions*, where our global scouting network identifies potential adjacent technology opportunities in Consumer Care and Life Sciences. On 4 July 2023, we completed the Solus Biotech acquisition in South Korea, which adds fermentation-derived active ingredients (notably ceramides), a new biotech hub and establishes a new manufacturing facility for Croda in North Asia. We will drive rapid sales growth by leveraging Croda's global selling network and formulation science expertise.

There are significant emerging opportunities for Croda across Asia particularly in consumer care and pharmaceutical markets. We are driving *fast growth in Asia*, by investing in innovation and sales resource plus selective expansion in manufacturing.

Our *'doing the basics brilliantly'* programme is improving our customer experience and employee productivity through a combination of customer insights, digital technology, new data architectures, and enhanced manufacturing capability. In addition to the temporary cost measures introduced to protect profitability as destocking continues, the programme is driving efficiencies within our well-established customer-centric model including a new online ordering portal complemented by more self-serve data for customers, and simplifying operating processes to improve employee productivity.

Sector strategies to deliver consistent growth and even stronger margins

We are *'strengthening to grow'* Consumer Care to be the most innovative, sustainable and responsive solution provider globally. Even in the current trading environment, demand for innovation remains strong, particularly for differentiated active ingredients. The fastest growth is coming from sustainable ingredients such as mineral sunscreens and sustainable hair care ingredients, and we are continuing to enhance our portfolio by adding more fermentation-derived ingredients and high-performance replacements for fossil-based products. Similarly, we are broadening our unrivalled ability to substantiate ingredient claims to include product carbon footprint data, incorporating the impact of decarbonisation to 2030. Finally, the continued fragmentation of consumer markets plays to our strengths as we partner with customers large and small globally enabling smaller customers to partner with us to launch their products quickly.

The move to biologics is the key structural driver of growth in both pharmaceutical and agriculture markets over the next decade, and our strategy is to *'expand to grow'* Life Sciences to empower biologics delivery. In agriculture, this move will enable greater targeting of actives and reduced biodiversity impact. In this market we are positioned as an innovation partner for delivery systems, creating new systems for the delivery of biopesticides and meeting the sustainability challenges of conventional pesticide delivery. In pharma markets, the move from chemical to biological active pharmaceutical ingredients is already underway and we have developed a portfolio focused on segments with the highest development and innovation needs. As a result, our pharma portfolio has a well-diversified risk profile and opportunity set, which we are expanding through new technologies from our own innovation pipeline and via partnerships. The competitive positioning of our pharma business is extremely strong, providing delivery systems that are critical to next-generation drugs and with excellent customer relationship spanning drug discovery through to commercial supply.

Leveraging our balance sheet strength to invest in the business

Last year's divestment of the majority of our industrials business strengthened our balance sheet, giving us greater optionality to invest in growth opportunities in the consumer care and life sciences markets. All investments are subject to disciplined returns metrics and are considered alongside our commitment to continued strong cash generation. Our priority is organic capital expenditure, supplemented by targeted acquisitions, in line with our preferred approach where we acquire and enter partnerships with businesses with critical knowledge and technology then build scale through organic investment.

The first half year saw investment in capital expenditure of £76.1m (2022: £61.8m). This investment included new Consumer Care laboratory capabilities in Shanghai, China and a new application centre in Hyderabad to support growing demand for protein and small molecule delivery from pharma customers in India. With our Pharma business a top priority for capital allocation, we are also continuing to expand R&D capabilities for adjuvant systems in Denmark and for nucleic acid delivery at Alabaster in the USA.

In addition to investments that help deliver the carbon reduction roadmaps that we have put in place for all sites, we are selectively expanding our manufacturing capability in Asia, including starting construction of a new surfactants plant in Dahej, India, and early-stage investment in a combined Beauty Actives and F&F manufacturing facility in Guangzhou to grow domestic sales in China. Over the period 2021 to 2024, we are also investing an extra £175m to scale up Pharma production, particularly to meet forecast market demand for new nucleic acid drugs which are widely expected to come to the market from 2025. £12m was invested in the programme in the first half year and over £100m invested to date. Alongside our investment, the US and UK Governments are co-investing up to an additional £75m, recognising the importance of new generation delivery systems to future drug discovery. We have historically invested 6-8% sales on capex. Heightened levels of capex are expected to continue through 2025 as the Pharma facilities are built, alongside the investments in Asia mentioned above to support our Consumer Care businesses in this important market.

We supplement our organic investment plan with selective acquisitions to add adjacent and complementary technologies. On 4 July 2023, we completed the acquisition of Solus Biotech, a global leader in premium, biotechnology-derived beauty actives, from Solus Advanced Materials for a total consideration of KRW350bn (approximately £232m) funded from cash and debt facilities. Employing 95 people in South Korea, the business generated approximately KRW43bn (c.£28m) of sales in 2022. The acquisition has excellent alignment with our strategic priorities, expanding our Asian manufacturing capability, adding a new biotechnology R&D hub in the region, and providing our Beauty Actives and Pharma businesses with access to Solus' existing biotech-derived ceramide and phospholipid technologies, and its emerging capabilities in natural retinol. Separately, we also signed two new licensing agreements with Amyris and BSI during the first half year to develop a sustainable supply chain for vaccine adjuvants.

Capital allocation will be in line with our stated policy which is to:

1. Reinvest for growth – investment in organic capital expenditure to drive shareholder value creation through new capacity, product innovation and expansion in attractive geographic markets to drive sales and profit growth;
2. Provide regular returns to shareholders – pay a regular dividend to shareholders, representing 40 to 50% of adjusted earnings over the business cycle;
3. Acquire disruptive technologies – to supplement organic growth, we are targeting 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.

The Board maintained the interim ordinary dividend at 47.0p (2022: 47.0p) reflecting its confidence in Croda's future performance. Debt leverage increased to 0.7x (31 December 2022: 0.5x) before completion of the Solus acquisition which closed after the period end, or 1.1x including payment of the acquisition consideration. The Board will monitor the Group's ongoing capital requirements, alongside any surplus capital, in line with our policy.

Outlook

With customer destocking in Consumer Care, Crop Protection and Industrial Specialities continuing into the second half year, we continue to expect full year 2023 Group adjusted profit before tax to be between £370m and £400m. We will leverage our strong balance sheet to sustain ongoing investment in our repositioned portfolio, focused on fast-growing niches, to create significant future value.

Non-financial Performance

Delivering our sustainability commitment

Our sustainability strategy is built on 23 UN SDG targets grouped around the themes of climate, nature and society, supporting our commitment to be Climate, Land and People Positive by 2030.

To be *Climate Positive*, the use of our ingredients will enable consumers to avoid more carbon than is associated with our operations and supply chain. Our industry-leading carbon emission reduction targets will ensure we contribute to limiting the global temperature rise to no more than 1.5°C above pre-industrial levels. In line with our verified science-based target (SBT), we will reduce operational greenhouse gas emissions by 46.2% between 2018 and 2030. In the first half year our scope 1 and 2 emissions were 56,184 tonnes CO₂e (H122: 65,229 tonnes CO₂e), with reductions tracking in line with our SBT. We are focused on implementing our externally validated decarbonisation roadmaps for every Croda location, supported by a higher internal carbon price of £124/tonne (previously £55/tonne) to ensure investment decisions align with our sustainability ambitions. We have also continued our focus on upstream supply chains, with key suppliers representing 24% of raw material volume publicly committed to SBTi carbon reduction targets.

To be *Land Positive*, we are committed to saving more land through the use of our crop protection, biostimulant and seed enhancement technologies, than is used to grow our bio-based raw materials, by at least a factor of two. We have an intermediate target to save a minimum of 80,000 hectares a year more in 2024 than in 2019. In the first half year we saved 25,449 hectares more than in the first half of 2019. We are expanding the scope of our Land Positive Commitment to consider biodiversity and ecosystem impacts, with the aim of adopting science-based targets for nature and aspiring to become Net Nature Positive by 2030. Our current focus is on understanding our impacts and dependencies on nature as a foundation for achieving this commitment.

Our *People Positive* objective covers both our communities and our people. We focus on using our smart science to improve lives globally, and the Croda Foundation has committed £3.3m in 28 grants across 20 countries since it was registered as a charity in 2021. The People Positive KPI is our Purpose and Sustainability Commitment (PSC) score generated from an all-employee survey which rose 3% to 63% in the recent survey. With a target to achieve gender balance in Croda leadership roles by 2030, we have maintained a gender balanced Board and increased the number of women in leadership roles to 40.2% (H122: 38.2%).

The *Fundamentals* element of our Commitment represents the 2030 license to operate for a multinational company such as Croda. Reflecting our absolute commitment to be a safe company for our communities and our employees, we have set a stronger safety target to reduce our Total Recordable Incident Rate ("TRIR") to 0.3 by 2025, requiring us to more than halve our 2022 rate. The current rate is 0.83 (H122: 0.77), excluding Covid-19 cases. Recorded occupational safety incidents saw a slight increase mainly driven by slips and trips. Significant training is underway across all sectors and locations globally, in line with our commitment to safety as a value.

Our sustainability targets have been updated for the divestment of the majority of PTIC.

Driving innovation

Growth of new and protected product (NPP) sales is our principal established measure for innovation with NPP sales defined as sales protected by virtue of being newly launched, protected by intellectual property or by unique quality characteristics.

NPP as a proportion of total sales was 33% (H122: 33%), as the benefit of the divestment of the majority of PTIC was offset by the absence of Covid-19 lipid sales in the first half year. By sector, NPP as a proportion of total sales was 40% in Consumer Care (H122: 40%), reflecting continued customer demand for innovation, and 31% in Life Sciences (H122: 43%) due to the Covid-19 lipid sales impact.

NPP growth is a key performance indicator that is used for remuneration. In the first half year, Group NPP sales fell by 3%, excluding Covid-19 lipid sales from the prior period.

Our innovation strategy combines our own R&D with external technology investments and partnerships to augment Croda's innovation centres globally. We continue to work with over 500 academic and SME partners, on more than 100 innovation projects.

Financial Performance

Currency translation

Sterling continued to strengthen sequentially but remained weaker than the same period last year against both the US Dollar, at US\$1.234 (H122: US\$1.301) and against the Euro, at €1.141 (H122: €1.189). Currency translation benefited sales by £31.4m and adjusted operating profit by £3.3m. Transactional currency impact is correlated with translation, given that the UK and EU are meaningful centres of production for the Group, with the weakness of both Sterling and the Euro against the US Dollar having a net positive impact.

Impact of PTIC divestment

The Group successfully completed the divestment of the majority of the Performance Technologies and Industrial Chemicals (PTIC) business on 30 June 2022, with the retained industrials business, including the SIPO joint venture in China, becoming the Industrial Specialties (IS) sector. Given the divested business did not meet the requirements for classification as a discontinued operation, the first half of 2022 included the full PTIC business and the second half year only the retained business. It is estimated that, had the divestment occurred at the start of 2022, sales in H122 would have been £191m lower at £152m and H122 adjusted operating profit would have been £39m lower at £22m. Pro forma H122 results have been adjusted for the divestment. On this basis, IS sales fell 20% to £122.1m and adjusted operating profit fell 62% to £8.3m.

Sales

Sales	2023	Price/mix	Volume	Currency	Change	2022
	£m					£m
Consumer Care	455.6	10.2%	(13.7)%	3.7%	0.2%	454.9
Life Sciences	303.2	(2.6)%	(8.8)%	3.4%	(8.0)%	329.7
Industrial Specialties	122.1	(0.4)%	(65.0)%	1.0%	(64.4)%	342.7
Group	880.9	15.3%	(40.0)%	2.7%	(21.9)%	1,127.3
Estimated pro forma sales						
Group	881	15%	(40)%	3%	(22)%	1,127
Pro forma adjustment						(191)
Group (pro forma)	881	9%	(18)%	3%	(6)%	936

Reported sales were down 21.9% to £880.9m (H122: £1,127.3m). On a pro forma basis they were down 6%, or by 9% at constant currency. Within this, price/mix improved by 9%, principally reflecting the annualisation impact of price increases in 2022 to recover inflation in raw material and other input costs. Group volumes reduced by 18% pro forma, with continued customer destocking across consumer, crop and industrial markets having a significant impact. While volumes remain significantly lower than the first half of 2022, they have improved versus the second half of 2022 when destocking was most intense.

Profit and margin

	2023			2022		
	IFRS £m	Adjustments £m	Adjusted £m	IFRS £m	Adjustments £m	Adjusted £m
Sales	880.9	-	880.9	1,127.3	-	1,127.3
Cost of sales	(498.4)	-	(498.4)	(591.3)	-	(591.3)
Gross profit	382.5	-	382.5	536.0	-	536.0
Operating costs	(252.3)	(45.6)	(206.7)	(247.4)	(11.8)	(235.6)
Operating profit	130.2	(45.6)	175.8	288.6	(11.8)	300.4
Gain on business disposal	-	-	-	360.6	360.6	-
Net interest charge	(1.5)	-	(1.5)	(12.7)	(1.1)	(11.6)
Profit before tax	128.7	(45.6)	174.3	636.5	347.7	288.8
Tax	(40.3)	4.0	(44.3)	(90.1)	(20.7)	(69.4)
Profit after tax	88.4	(41.6)	130.0	546.4	327.0	219.4

Operating profit/(loss)	2023			2022		
	IFRS £m	Adjustments £m	Adjusted £m	IFRS £m	Adjustments £m	Adjusted £m
Consumer Care	79.2	(16.0)	95.2	110.9	(10.2)	121.1
Life Sciences	63.6	(8.7)	72.3	118.2	(0.6)	118.8
Industrial Specialties	(12.6)	(20.9)	8.3	59.5	(1.0)	60.5
Group	130.2	(45.6)	175.8	288.6	(11.8)	300.4

	2023 £m	Constant currency change £m	Currency impact £m	2022 £m	Change
Adjusted profit					
Consumer Care	95.2	(28.0)	2.1	121.1	(21.4)%
Life Sciences	72.3	(47.9)	1.4	118.8	(39.1)%
Industrial Specialties	8.3	(52.0)	(0.2)	60.5	(86.3)%
Operating profit	175.8	(127.9)	3.3	300.4	(41.5)%
Net interest	(1.5)			(11.6)	87.1%
Profit before tax	174.3			288.8	(39.6)%

	2023 £m	2022 £m	Change
Estimated pro forma profit			
Operating profit	176	300	(42)%
Pro forma adjustment	-	(39)	-
Operating profit (pro forma)	176	261	(33)%
Net interest	(2)	(5)	60%
Profit before tax (pro forma)	174	256	(32)%

IFRS operating profit was £130.2m (H122: £288.6m) and profit before tax £128.7m (H122: £636.5m). IFRS profit before tax included a charge for adjusting items of £45.6m (H122: £12.9m), including a goodwill impairment of £20.8m to the carrying value of the Chinese SIPO joint venture in Industrial Specialties, a charge for amortisation of acquired intangible assets of £17.1m (H122: £17.3m) and acquisition costs of £7.7m. Exceptional items in the prior half year also included a profit on the PTIC divestment of £360.6m, a gain on contingent consideration of £5.5m and interest on discount unwind of contingent consideration £1.1m.

Group adjusted operating profit reduced by 33% on a pro forma basis to £175.8m (H122 pf: £261m), with an operating margin of 20.0% (H122 pf: 28%). With a large reduction in volumes in the first half year, the biggest impact on margin was operating leverage, with reduced fixed overhead coverage accounting for a reduction in operating margin of around five percentage points. Adverse mix, principally due to the absence of Covid-19 lipid sales in the first half year, also had an impact, reducing operating margin by around four percentage points.

There were a number of non-trading impacts that benefited the adjusted operating margin by just over one percentage point. The lower variable remuneration charge benefited all sector margins by just under one percentage point and Consumer Care also saw a benefit from release of accruals for an earn out associated with the Iberchem acquisition. Following the PTIC divestment, associated dis-synergy costs that were previously allocated to the divested business have been reallocated across the Consumer Care and Life Sciences sectors. This benefited Industrial Specialties but reduced the operating margin in Consumer Care and Life Sciences by just under one percentage point respectively.

Net finance costs were minimal in the period due to the proceeds from the PTIC divestment and pension interest income, with adjusted profit before tax of £174.3m (H122: £288.8m). The effective tax rate on adjusted profit was 25.4% (H122: 24.0%). The effective tax rate on IFRS profit was higher at 31.3% (H122: 14.2%) as the exceptional costs were mainly capital in nature and therefore not tax deductible. The prior period effective tax rate on IFRS profit was significantly lower as the Group utilised eligible corporate tax exemptions on its profit from the PTIC divestment. There were no significant adjustments between the Group's expected and reported adjusted tax charge based on its accounting profit. IFRS basic earnings per share (EPS) were 63.1p (H122: 389.6p) and adjusted basic EPS were 92.9p (H122: 155.2p).

Free cash flow

	2023 £m	2022 £m
Cash flow		
Adjusted operating profit	175.8	300.4
Depreciation and amortisation	43.4	43.5
EBITDA	219.2	343.9
Working capital	(9.7)	(183.8)
Net capital expenditure	(76.1)	(61.8)
Payment of lease liabilities	(8.0)	(8.8)
Non-cash pension expense	(1.7)	5.0
Interest & tax	(47.3)	(73.4)
Free cash flow	76.4	21.1
Dividends	(85.1)	(78.8)
Acquisitions	(11.2)	(14.2)
Business disposal net of cash in disposed businesses	(4.4)	613.4
Other cash movements	(42.4)	(22.1)
Net cash flow	(66.7)	519.4
Net movement in borrowings	150.7	154.3
Net movement in cash and cash equivalents	84.0	673.7

Free cash flow improved to £76.4m (H122: £21.1m), with lower EBITDA and an increase in capital expenditure more than offset by a reduced working capital outflow of £9.7m. This follows a significant increase in working capital in the first half of 2022 of £183.8m, principally due to inflation in raw materials and other costs.

As at 30 June 2023, the Group had committed funding in place of £1,050.7m, with undrawn long-term committed facilities of £367.7m and £379.5m in cash. With net debt of £349.3m as at 30 June 2023, net leverage was 0.7x EBITDA, below our medium-term target range of one to two times EBITDA.

Completion of Solus Biotech acquisition

Post period end, the acquisition of Solus Biotech was completed for a total consideration of KRW350bn (approximately £232m) on a debt-free, cash-free basis, with the acquisition funded through existing cash and debt facilities. Following payment of the acquisition consideration, net leverage increased to 1.1x.

Retirement benefits

The post-tax asset on retirement benefit plans at 30 June 2023, measured on an accounting valuation basis under IAS19, was broadly flat at £72.0m (31 December 2022: £75.2m). 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. An updated actuarial triennial valuation will be performed later this year.

Sector Performance

Consumer Care – continued destocking; sequential performance improvement

As previously disclosed, Consumer Care performance was negatively impacted by a challenging environment, with customers reducing their ingredient inventories in most developed regions of the world. While it is normal for customer inventory levels to fluctuate, we have not previously seen the speed and scale of the rapid stocking that followed Covid-19 and subsequent destocking first experienced in North America a year ago.

First half performance improved compared with the second half of last year with volumes up 8%. However, customers have continued to reduce inventory levels and this industry destocking trend continues to negatively impact volumes which were down 14% compared with the same period last year. Price/mix was up 10%, comprising an estimated 4% benefit from mix and 6% benefit from price mainly due to increases implemented in 2022. Positive price/mix and favourable foreign exchange rates, which added 4% in the first half year, meant sales were flat at £455.6m (H122: £454.9m). Other than Fragrances and Flavours (F&F), the three business units in Consumer Care experienced similar trends with strong price/mix offsetting weaker volumes resulting in flat sales but at lower margins.

IFRS operating profit was £79.2m (H122: £110.9m) and adjusted operating profit was £95.2m (H122: £121.1m). Consumer Care operating profit margin was 20.9% (H122: 26.6%), a small improvement on the second half of 2022 (18.9%) but below the first half of 2022 due to negative operating leverage from lower volumes.

The sequential improvement continued throughout the period with sales volumes in June higher than the monthly average for the first half year. Importantly, customers are continuing to invest in new product development and demand for innovation remains strong with sales of new and protected products (NPP) reflecting this continued demand at 40% (H122: 40%) of total sector sales.

Consumer Care comprises four business units. **Beauty Actives** (c20% of sector sales) has the largest actives portfolio in the industry across over 15,000 customer/product combinations. The strategy is to scale our market leadership by adding innovative technologies and reinforcing our unrivalled substantiation of ingredient claims. Sales were broadly flat in Beauty Actives as positive mix, estimated at 13%, alongside 4% price benefit helped offset weaker volumes (down 19%). Positive mix was driven by strong sales of Sederma's premium active ingredients particularly to China where Sederma sales grew over 30%. The business supported new customer products with peptides for the new Boots No7 Future Renew range and for a new Deciem product that repairs scars caused by acne. Our ingredients are increasingly derived from biotechnology with new launches including an active that fades age spots caused by the sun, and anti-ageing and anti-dandruff actives derived from marine biotechnology. The acquisition of Solus Biotech at the beginning of July added further biotech-derived active ingredients into our portfolio, notably ceramides. We will drive rapid sales growth of Solus ingredients by leveraging Croda's global selling network and formulation science expertise.

Beauty Care (c50% of sector sales) delivers differentiated ingredients for skin, hair and solar care across over 23,000 customer/product combinations. The strategy is to strengthen Beauty Care with sustainable ingredients, smaller franchises to provide greater focus and by positioning the business as a go-to-market partner for customers large and small. Volume recovery has been stronger in Beauty Care than in Beauty Actives and Home Care, albeit from a lower base. Already a sustainability leader, the business is adding further high-performance replacements for fossil-based products, such as biotech-derived surfactants to reinforce a number one position in sustainable surfactants. In hair care, our focus is on biodegradable hair care ingredients and non-animal alternatives for hair conditioning. In sun protection we specialise in mineral sunscreens that deliver superior SPF protection, are 'reef safe' and appear clear on the skin. The continued fragmentation of beauty care markets plays to our strengths as we partner with customers large and small enabling them to launch their products quickly. We are leveraging this position as go-to-market partner through Formulation Academies where we share our expertise with customers and at our innovation centres globally where we offer to co-create customer products. We are also broadening our unrivalled ability to substantiate ingredient claims to include product carbon footprint data, incorporating the impact of decarbonisation to 2030.

F&F (c25% of sector sales) is the preeminent emerging market provider, with near-global reach and innovative technologies that meet smaller customers' needs. The strategy is to drive integration synergies in F&F by expanding Croda's presence in emerging markets and providing Iberchem with access to Croda's developed market presence, while supporting one-stop-shop formulations and developing more sustainable fragrances. F&F is fulfilling its role in the portfolio, growing sales by 20% comprising an estimated 9% benefit from volume and 7% benefit from price/mix as the business leveraged its emerging market exposure and agile, cost competitive positioning. F&F sales growth was across all established regions with the Middle East particularly strong. Delivery of sales synergies from the Iberchem acquisition also continues to make good progress including a new multi-million pound a year sales opportunity to supply fragrances to a multinational company for premium hand wash products in regions where Iberchem has local production. Projects are also underway to develop bio-based fragrance ingredients, prioritising aroma chemicals which are used in a high proportion of our fragrance references.

Home Care (c5% of sector sales) is focused on bringing Croda's ingredients to selective premium home care markets. This is delivered through two technology platforms which provide improved efficacy and sustainability: fabric care, with proteins that increase the lifetime of clothes; and household care, with sustainable alternatives to fossil-based surfactants. Sales fell in Home Care where volumes were weakest, but price/mix was positive with sales of sustainable surfactants and fabric care proteins performing best.

We are continuing to invest to drive fast growth in Asia where investment has included a new innovation centre for Consumer Care customers in Shanghai, a new surfactants production site in Dahej, India, and initial capital expenditure for a combined Beauty Actives/F&F facility in Guangzhou, China, which will provide four times the current capacity and is due to commission in 2025.

Life Sciences – growth across all areas excluding prior period Covid-19 lipid sales

Life Sciences serves customers in agriculture and pharmaceutical sectors across three businesses: Crop Protection, which grew sales but experienced significant destocking in the second quarter, as well as Seed Enhancement and Pharma where the growth drivers remained strong.

Sales fell 8% to £303.2m (H122: £329.7m), the prior period having benefited from \$62m of lipid sales to our principal vaccine customers. Excluding this impact, sales increased 8%, comprising good sales growth in Pharma and Seed Enhancement, and more modest sales growth in Crop Protection. On a reported basis, price/mix decreased by 2%, while volume was 9% lower and currency translation added 3%. Sales of new and protected products (NPP) as a percentage of total sector sales fell to 31% (H122: 43%), reflecting the absence of Covid-19 lipid sales. Shipments of lipid systems to our principal Covid vaccine customers are expected to occur as planned in the final quarter of 2023 benefitting NPP and sector operating profit margin in the second half year.

IFRS operating profit was £63.6m (H122: £118.2m) and adjusted operating profit was £72.3m (H122: £118.8m). Life Sciences' operating profit margin of 23.8% (H122 36.0%) was negatively impacted by adverse mix including lower sales for Covid-19 applications in the Pharma business, which accounted for approximately eight percentage points of the margin decline, with negative operating leverage principally in Crop Protection accounting for approximately four percentage points.

Life Sciences comprise three businesses. **Crop Protection** (c35% of sector sales) is positioned as innovation partner to major crop science companies, and an increasing number of smaller customers, offering ingredients that improve performance and delivery of crop formulations. Our strategy is to enable customers to meet the sustainability challenges of conventional pesticide delivery and help accelerate the move to biopesticides that will enable greater targeting of actives and reduced biodiversity impact. Following an exceptional 2022, when Crop Protection delivered both strong double-digit percentage volume growth and price/mix, the business started the year with good momentum, delivering positive volumes and flat pricing in the first quarter on a sequential basis. It began to experience rapid customer destocking in the second

quarter, which was a factor originally expected to materialise more gradually later in the year, with volumes down more than 30 per cent and price down mid-single digits compared with Q1. Overall, the business grew sales by 5% in the half year, with a 13% benefit from price/mix increases and favourable foreign exchange rates which added 4% more than offsetting a 12% fall in volume.

Seed Enhancement (c10% of sector sales) leverages our leadership in seed coating systems to improve germination, stimulate healthy development of seeds and increase crop yield. With a significant proportion of sales derived from providing enhancement services for vegetable seeds, the business only sees a limited impact from stocking cycles and delivered an excellent 18% sales increase in the first half year, driven by strong structural growth trends. Our strategy is to be the leader in sustainable solutions for field and vegetable crops, and our microplastic-free seed coatings have already delivered more than £1m sales of a multi-million pound opportunity.

In pharmaceutical markets, the move from chemical to biological active pharmaceutical ingredients is already underway and our **Pharma** business (c55% of sector sales) targets leadership in biologics drug delivery. We have established an industry-leading position in empowering biologics delivery, acquiring and partnering with businesses with critical knowledge and technology then building scale through organic investment. This approach has ensured the business has excellent competitive positioning focused on segments with the highest innovation needs and with customers spanning drug discovery through to commercial supply. It delivered 8% sales growth, excluding prior period lipid sales to our principal vaccine customers. With its broad portfolio and diversified risk profile, we only saw a limited impact on performance from destocking and funding constraints for early-stage biotech businesses that are reported to have affected other companies. We are making rapid progress expanding the business, adding new technologies from our own innovation pipeline and partnerships, and scaling operations to support breakout growth.

Our Pharma business comprises three platforms:

- **Protein/Small Molecule Delivery** has an established record of providing excipients for delivery of complex small molecule, protein and monoclonal antibody (mAb) drugs. Through the Solus Biotech acquisition, we have added phospholipids to its portfolio for drug delivery and intravenous nutrition. In line with our strategy, we have also expanded into bioprocessing aids, a target adjacency, launching Virodex as an aid for biopharma manufacturing and a superior alternative to a product from another company that is now banned in Europe.
- **Adjuvant Systems** is the leading independent supplier of adjuvants which are used as immune response boosters for vaccines. Our strategy is to accelerate use of innovative adjuvant systems which are essential to the development of future preventative and therapeutic vaccines. We have expanded our adjuvants portfolio through the launch of a new lipid-based adjuvant developed in-house and already sampled into 70 vaccine projects, and through licensing agreements for reliable, sustainable alternatives for adjuvant systems that are essential to many current and future vaccines.
- **Nucleic Acid Delivery** was created as a result of our 2020 acquisition of Avanti which brought an unmatched portfolio of over 3,000 R&D customer relationships, and a diverse range of lipids and similar components for nucleic acid delivery. Clinicals trials of nucleic acid-based drugs have increased rapidly over the last twelve months, with pharma industry pipelines growing by more than six times for mRNA vaccines for infectious diseases, over seven times for cancer vaccines and one and a half times for gene editing where the volumes of genetic material and delivery systems required are much higher. Croda is supporting more than half of the clinical programmes that specify lipid delivery systems. New mRNA vaccines are expected to come to the market in the next two years, helping to drive accelerated growth in our Pharma business from 2025.

We are continuing to invest in line with our stated Pharma investment programme with £12m spent in the period and over £100m invested to date. In June 2023, we opened a new laboratory in Hyderabad, India to meet growing demand for small molecule and protein delivery and 'broke ground' at Lamar, USA as part of our partnership with the US Government, where new capacity is due on stream in 2025.

Industrial Specialties – performance reflecting destocking and lower global demand

On 30 June 2022, Croda divested the majority of the Performance Technologies and Industrial Chemicals (PTIC) business to Cargill Inc. The retained industrials business, including the SIPO joint venture in China, has become the Industrial Specialties (IS) sector.

Although the sector is not a priority for capital allocation and strategic growth, IS plays an important role in our manufacturing model, supporting the Consumer Care and Life Sciences sectors on shared sites and operating a medium-term supply contract to the new owner of the divested business.

The first half of 2022 included the full PTIC business and the second half year only included the retained business. It is estimated that, had the divestment occurred at the start of 2022, sales in H122 would have been £191m lower at £152m

and H122 adjusted operating profit would have been £39m lower at £22m. On this basis, sales fell 20% in the first half of this year to £122.1m principally due to lower volumes, reflecting destocking and weak industrial demand globally, and adjusted operating profit fell 62% to £8.3m as negative operating leverage compounded the impact of lower volumes. The impact of these adverse market conditions on the SIPO joint venture in China are expected to continue over the medium term and have resulted in an impairment charge of £20.8m on goodwill. Including the impairment charge, the reported IFRS loss was £12.6m (H122: £59.5m profit), with the prior period including the full contribution from the divested business.

Other Matters

Principal risks

The principal risks and uncertainties facing the Group were set out on pages 52 to 58 of the Group's financial statements for the year ended 31 December 2022. There have been no changes in the Group's principal risks and uncertainties, risk management processes or policies since the year end. The Group's principal risks as reported in the financial statements for the year ended 31 December 2022 were revenue generation; product and technology innovation and protection; digital technology innovation; delivering sustainable solutions – Climate and Land Positive; management of business change; our people – culture, wellbeing, talent development and retention; product quality; loss of significant manufacturing site; ethics and compliance; and security of business information and networks. Within revenue generation risk, we reported that this risk increased in likelihood and impact during 2022 as greater geopolitical instability, rising inflation and slowing economic growth increased uncertainty. Whilst customer destocking is the principal driver of lower volumes in Consumer Care, there is a continued risk that performance will be affected by reduced end-consumer demand which could impact our ability to deliver short-term growth in consumer-facing markets.

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 2023 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
Chris Good
Professor Keith Layden
Louisa Burdett
John Ramsay
Julie Kim
Nawal Ouzren

By order of the Board

Steve Foots
Group Chief Executive

Louisa Burdett
Chief Financial Officer

Independent Review Report to Croda International Plc

Conclusion

We have been engaged by Croda International Plc (“the Company”) to review the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2023 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-yearly financial report for the six months ended 30 June 2023 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”).

Basis for conclusion

We conducted our review in accordance with International Standard on Review Engagements (UK) 2410 *Review of Interim Financial Information Performed by the Independent Auditor of the Entity* (“ISRE (UK) 2410”) issued 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-yearly financial report 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.

Conclusions relating to going concern

Based on our review procedures, which are less extensive than those performed in an audit as described in the Basis for conclusion section of this report, nothing has come to our attention that causes us to believe that the Directors have inappropriately adopted the going concern basis of accounting, or that the Directors have identified material uncertainties relating to going concern that have not been appropriately disclosed. This conclusion is based on the review procedures performed in accordance with ISRE (UK) 2410. However, future events or conditions may cause the Group to cease to continue as a going concern, and the above conclusions are not a guarantee that the Group will continue in operation.

Directors’ responsibilities

The half-yearly financial report is the responsibility of, and has been approved by, the Directors. The Directors are responsible for preparing the half-yearly financial report in accordance with the DTR of the UK FCA. As disclosed in note 1, the annual financial statements of the Group are 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-yearly financial report in accordance with IAS 34 as adopted for use in the UK. In preparing the condensed set of financial statements, the Directors are responsible for assessing the Group’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Our responsibility

Our responsibility is to express to the Company a conclusion on the condensed set of financial statements in the half-yearly financial report based on our review. Our conclusion, including our conclusions relating to going concern, are based on procedures that are less extensive than audit procedures, as described in the Basis for conclusion section of this report.

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

24 July 2023

Croda International Plc

Interim announcement of trading results for the six months ended 30 June 2023

Group Condensed Interim Income Statement

	Note	First half 2023			First half 2022			Full year 2022		
		Adjusted £m	Adjustments £m	Reported Total £m	Adjusted £m	Adjustments £m	Reported Total £m	Adjusted £m	Adjustments £m	Reported Total £m
Revenue	2	880.9	–	880.9	1,127.3	–	1,127.3	2,089.3	–	2,089.3
Cost of sales		(498.4)	–	(498.4)	(591.3)	–	(591.3)	(1,103.7)	–	(1,103.7)
Gross profit		382.5	–	382.5	536.0	–	536.0	985.6	–	985.6
Operating costs		(206.7)	(45.6)	(252.3)	(235.6)	(11.8)	(247.4)	(470.5)	(70.4)	(540.9)
Operating profit	2	175.8	(45.6)	130.2	300.4	(11.8)	288.6	515.1	(70.4)	444.7
Gain on business disposal		–	–	–	–	360.6	360.6	–	356.0	356.0
Financial costs	3	(6.5)	–	(6.5)	(12.4)	(1.1)	(13.5)	(24.1)	(1.7)	(25.8)
Financial income	3	5.0	–	5.0	0.8	–	0.8	5.1	–	5.1
Profit before tax		174.3	(45.6)	128.7	288.8	347.7	636.5	496.1	283.9	780.0
Tax		(44.3)	4.0	(40.3)	(69.4)	(20.7)	(90.1)	(112.9)	(13.8)	(126.7)
Profit after tax for the period		130.0	(41.6)	88.4	219.4	327.0	546.4	383.2	270.1	653.3
Attributable to:										
Non-controlling interests		0.3	–	0.3	2.9	–	2.9	4.0	–	4.0
Owners of the parent		129.7	(41.6)	88.1	216.5	327.0	543.5	379.2	270.1	649.3
		130.0	(41.6)	88.4	219.4	327.0	546.4	383.2	270.1	653.3

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

		Pence Adjusted	Pence Reported Total	Pence Adjusted	Pence Reported Total	Pence Adjusted	Pence Reported Total
Earnings per 10.61p ordinary share							
Basic		92.9	63.1	155.2	389.6	272.0	465.8
Diluted		92.8	63.0	154.9	388.8	271.4	464.8
Ordinary dividends paid in the period							
Interim	4		–		–		47.0
Final	4		61.0		56.5		56.5

Group Condensed Interim Statement of Comprehensive Income

	2023 First half £m	2022 First half £m	2022 Full year £m
Profit after tax for the period	88.4	546.4	653.3
Other comprehensive (expense)/income:			
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
Remeasurements of post-retirement benefit obligations	(10.9)	99.3	88.9
Tax on items that will not be reclassified	2.8	(24.9)	(22.4)
	(8.1)	74.4	66.5
<i>Items that have been or may be reclassified subsequently to profit or loss:</i>			
Currency translation	(69.8)	87.8	104.2
Reclassification of currency translation	–	(14.8)	(14.8)
Cash flow hedging	(20.8)	2.8	2.8
Reclassification of cash flow hedging	–	(6.5)	(6.5)
Reclassification of cost of hedging reserve	–	6.0	6.0
Tax on items that may be reclassified	–	(0.4)	(0.4)
	(90.6)	74.9	91.3
Other comprehensive (expense)/income for the period	(98.7)	149.3	157.8
Total comprehensive (expense)/income for the period	(10.3)	695.7	811.1
Attributable to:			
Non-controlling interests	(0.8)	3.5	4.4
Owners of the parent	(9.5)	692.2	806.7
	(10.3)	695.7	811.1
Arising from:			
Continuing operations	(10.3)	695.7	811.1

Group Condensed Interim Balance Sheet

	Note	At 30 June 2023 £m	At 31 December 2022 £m
Assets			
<i>Non-current assets</i>			
Intangible assets	5	1,188.1	1,253.2
Property, plant and equipment	6	969.5	964.5
Right of use assets		89.3	96.9
Investments		3.3	3.4
Deferred tax assets		9.0	10.3
Retirement benefit assets	8	117.0	123.2
		2,376.2	2,451.5
<i>Current assets</i>			
Inventories		419.5	464.0
Trade and other receivables		365.3	375.8
Cash and cash equivalents		379.5	320.6
		1,164.3	1,160.4
Liabilities			
<i>Current liabilities</i>			
Trade and other payables		(260.6)	(320.0)
Borrowings and other financial liabilities		(39.7)	(121.9)
Lease liabilities		(12.7)	(12.9)
Provisions		(5.3)	(6.1)
Current tax liabilities		(18.1)	(26.9)
		(336.4)	(487.8)
Net current assets		827.9	672.6
<i>Non-current liabilities</i>			
Borrowings and other financial liabilities		(603.7)	(401.8)
Lease liabilities		(72.7)	(79.2)
Other payables		(1.1)	(4.5)
Retirement benefit liabilities	8	(23.0)	(23.1)
Provisions		(12.1)	(11.5)
Deferred tax liabilities		(164.0)	(172.9)
		(876.6)	(693.0)
Net assets		2,327.5	2,431.1
Equity			
Equity attributable to owners of the parent		2,312.8	2,415.6
Non-controlling interests in equity		14.7	15.5
Total equity		2,327.5	2,431.1

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 2022		16.2	707.7	(43.8)	1,073.0	12.8	1,765.9
Profit after tax for the period		–	–	–	543.5	2.9	546.4
Other comprehensive income for the period		–	–	74.3	74.4	0.6	149.3
Total comprehensive income for the period		–	–	74.3	617.9	3.5	695.7
Transactions with owners:							
Dividends on equity shares	4	–	–	–	(78.8)	–	(78.8)
Share-based payments		–	–	–	3.5	–	3.5
Transactions in own shares		–	–	–	(10.6)	–	(10.6)
Total transactions with owners		–	–	–	(85.9)	–	(85.9)
Changes in ownership interests:							
Acquisition of an NCI		–	–	–	0.3	(1.7)	(1.4)
Total changes in ownership interests		–	–	–	0.3	(1.7)	(1.4)
Preference share capital reclassification		(1.1)	–	–	–	–	(1.1)
Total equity at 30 June 2022		15.1	707.7	30.5	1,605.3	14.6	2,373.2
At 1 January 2023		15.1	707.7	47.1	1,645.7	15.5	2,431.1
Profit after tax for the period		–	–	–	88.1	0.3	88.4
Other comprehensive expense for the period		–	–	(89.5)	(8.1)	(1.1)	(98.7)
Total comprehensive (expense)/income for the period		–	–	(89.5)	80.0	(0.8)	(10.3)
Transactions with owners:							
Dividends on equity shares	4	–	–	–	(85.1)	–	(85.1)
Share-based payments		–	–	–	1.6	–	1.6
Transactions in own shares		–	–	–	(9.8)	–	(9.8)
Total transactions with owners		–	–	–	(93.3)	–	(93.3)
Total equity at 30 June 2023		15.1	707.7	(42.4)	1,632.4	14.7	2,327.5

Other reserves include the Capital Redemption Reserve of £0.9m (30 June 2022: £0.9m), the Hedging Reserve of £(20.8)m (30 June 2022: £nil) and the Translation Reserve of £(22.5)m (30 June 2022: £29.6m).

Group Condensed Interim Statement of Cash Flows

	Note	2023 First half £m	2022 First half £m	2022 Full year £m
Cash generated by operations				
Operating profit		130.2	288.6	444.7
Adjustments for:				
Depreciation and amortisation		60.5	60.8	120.7
Fair value movement on contingent consideration		–	(5.5)	(6.1)
Impairments of intangible assets and property, plant and equipment		21.8	–	42.2
(Profit)/loss on disposal and write-offs of intangible assets and property, plant and equipment		(0.5)	(0.1)	0.2
Net provisions (released)/charged		(0.2)	–	1.6
Share-based payments		(3.6)	(10.4)	(11.0)
Non-cash pension expense		(1.7)	5.0	4.5
Cash paid against operating provisions		(0.3)	(0.5)	(0.8)
Movement in inventories		30.4	(67.6)	(98.1)
Movement in receivables		0.5	(140.3)	(43.3)
Movement in payables		(40.6)	24.1	7.6
Cash generated by operations		196.5	154.1	462.2
Interest paid		(7.9)	(11.5)	(23.2)
Tax paid		(44.4)	(62.7)	(130.8)
Net cash generated from operating activities		144.2	79.9	308.2
Cash flows from investing activities				
Payment of contingent consideration		(7.2)	(12.8)	(13.7)
Purchase of property, plant and equipment		(81.8)	(60.9)	(141.2)
Receipt of government grant		6.5	–	6.1
Purchase of other intangible assets		(5.8)	(2.8)	(11.2)
Proceeds from sale of property, plant and equipment		1.0	1.9	1.7
Proceeds from business disposal, net of cash in disposed business		–	613.4	583.6
Tax paid on business disposals		(4.4)	–	(4.6)
Settlement of derivatives		(20.8)	–	–
Cash paid against non-operating provisions		(0.5)	(0.5)	(1.2)
Interest received		5.0	0.8	5.1
Net cash (used)/generated from investing activities		(108.0)	539.1	424.6
Cash flows from financing activities				
New borrowings		215.7	207.4	232.6
Repayment of borrowings		(65.0)	(53.1)	(614.4)
Payment of lease liabilities		(8.0)	(8.8)	(17.4)
Acquisition of non-controlling interest		–	(1.4)	(1.4)
Net transactions in own shares		(9.8)	(10.6)	(7.3)
Dividends paid to equity shareholders	4	(85.1)	(78.8)	(144.4)
Net cash generated/(used) from financing activities		47.8	54.7	(552.3)
Net movement in cash and cash equivalents		84.0	673.7	180.5
Cash and cash equivalents brought forward		281.6	94.3	94.3
Exchange differences		(6.9)	6.2	6.8
Cash and cash equivalents carried forward		358.7	774.2	281.6
Cash and cash equivalents carried forward comprise:				
Cash at bank and in hand		379.5	786.4	320.6
Bank overdrafts		(20.8)	(12.2)	(39.0)
		358.7	774.2	281.6

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 24 July 2023. The financial information included in this interim financial report for the six months ended 30 June 2023 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 2022 is also unaudited. The comparative figures for the year ended 31 December 2022 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 2023 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 2023 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 2023 using rates substantively enacted by 30 June 2023 as required by IAS 34 'Interim Financial Reporting'.

The annual financial statements of the Group for the year ended 31 December 2023 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 2022, 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 condensed consolidated financial statements have been prepared on a going concern basis which the Directors believe to be appropriate for the following reasons:

At 30 June 2023 the Group had £1,050.7m of committed debt facilities available from its banking group, USPP bondholders and lease providers, with principal maturities between 2026 and 2030, of which £367.7m (30 June 2022: £263.4m) was undrawn, together with cash balances of £379.5m (30 June 2022: £786.4m).

The Directors have reviewed the liquidity and covenant forecasts, which included the impact of the Solus acquisition, for the Group's going concern assessment period covering at least 12 months from the date of approval of the condensed consolidated financial statements. Based on these forecasts, the Group continues to have significant liquidity headroom and strong financial covenant headroom under its debt facilities.

A reverse stress testing scenario has been performed which assesses that adjusted operating profit would need to fall by approximately 80% to trigger an event of default as at 31 December 2024, before consideration of available actions to conserve cash. The Directors do not consider this a plausible scenario. The Directors are therefore satisfied that the Group has sufficient resources to continue in operation for a period of not less than 12 months from the date of approval of the condensed consolidated financial statements. Accordingly, the condensed consolidated 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 2022.

A number of new standards are effective from 1 January 2023 but they do not have a material effect on the Group's financial statements.

2. Segmental information

The Group's sales, marketing and research activities are organised into three global market sectors, being Consumer Care, Life Sciences and Industrial Specialties. 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. Following the divestment of the majority of the Performance Technologies and Industrial Chemicals business in 2022, the retained business now forms a new Industrial Specialties sector. Accordingly, the Group has combined the previously reported segment information for the six months ended 30 June 2022 for both Performance Technologies and Industrial Chemicals and shown as Industrial Specialties. This is aligned with the information that is regularly reported to the Group's Executive Committee.

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

	2023 First half £m	2022 First half £m	2022 Full year £m
Exceptional items – operating profit			
Business acquisition costs	(7.7)	–	–
Goodwill impairment	(20.8)	–	(34.6)
Property, plant and equipment impairment	–	–	(7.6)
Fair value movement on contingent consideration	–	5.5	6.1
Exceptional items – financial costs			
Unwind of discount on contingent consideration	–	(1.1)	(1.7)
Gain on business disposal	–	360.6	356.0
Exceptional items	(28.5)	365.0	318.2
Amortisation of intangible assets arising on acquisition	(17.1)	(17.3)	(34.3)
Total adjustments	(45.6)	347.7	283.9

The exceptional items in the current year relate to a goodwill impairment to the carrying value of the Chinese SIPO joint venture in Industrial Specialties and acquisition costs. The goodwill impairment and acquisition costs have been presented as exceptional due to their size and one-off nature. The exceptional items in the prior half year related to the gain on the PTIC divestment, associated business disposal costs and discount unwind and fair value adjustment both in respect of contingent consideration. The adjustments to operating profit relate to our segments as follows: Consumer Care £16.0m (30 June 2022: £10.2m), Life Sciences £8.7m (30 June 2022: £0.6m) and Industrial Specialties £20.9m (30 June 2022: £1.0m).

	2023 First half £m	Restated 2022 First half £m	2022 Full year £m
Income statement			
Revenue			
Consumer Care	455.6	454.9	897.8
Life Sciences	303.2	329.7	682.3
Industrial Specialties	122.1	342.7	509.2
Total Group revenue	880.9	1,127.3	2,089.3
Adjusted operating profit			
Consumer Care	95.2	121.1	204.7
Life Sciences	72.3	118.8	229.4
Industrial Specialties	8.3	60.5	81.0
Total Group operating profit (before exceptional items and amortisation of intangible assets arising on acquisition)	175.8	300.4	515.1
Exceptional items and amortisation of intangible assets arising on acquisition	(45.6)	(11.8)	(70.4)
Total Group operating profit	130.2	288.6	444.7

2. Segmental information continued

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

	Europe £m	North America £m	Latin America £m	Asia £m	Reported Total £m
Revenue					
First half 2023					
Consumer Care	196.7	99.0	44.3	115.6	455.6
Life Sciences	107.9	92.1	50.4	52.8	303.2
Industrial Specialties	46.7	20.8	5.5	49.1	122.1
Total Group revenue	351.3	211.9	100.2	217.5	880.9
Revenue					
First half 2022 (Restated)					
Consumer Care	182.4	123.1	43.8	105.6	454.9
Life Sciences	137.5	93.4	41.7	57.1	329.7
Industrial Specialties	162.7	69.7	14.4	95.9	342.7
Total Group revenue	482.6	286.2	99.9	258.6	1,127.3

3. Net financial costs

	2023 First half £m	2022 First half £m	2022 Full year £m
Financial costs			
Interest payable on borrowings	(4.7)	(9.8)	(17.4)
Interest on lease liabilities	(1.2)	(1.2)	(2.5)
Other bank loans and overdrafts	(0.6)	(1.4)	(2.9)
Other interest costs	–	–	(1.2)
Unwind of discount on contingent consideration (exceptional)	–	(1.1)	(1.7)
Preference share dividend	–	–	(0.1)
	(6.5)	(13.5)	(25.8)
Financial income			
Bank interest receivable and similar income	2.3	0.6	2.7
Net interest on post-retirement benefits	2.7	0.2	2.4
	5.0	0.8	5.1
Net financial costs	(1.5)	(12.7)	(20.7)

4. Dividends

	Pence per share	2023 First half £m	2022 First half £m	2022 Full year £m
Ordinary				
2021 final, paid June 2022	56.5	–	78.8	78.8
2022 interim, paid October 2022	47.0	–	–	65.6
2022 final, paid May 2023	61.0	85.1	–	–
		85.1	78.8	144.4

An interim dividend in respect of 2023 of 47.0p per share, amounting to a total dividend of £65.6m, was declared by the Directors at their meeting on 20 July 2023. This interim report does not reflect the 2023 interim dividend payable. The dividend will be paid on 3 October 2023 to shareholders registered on 1 September 2023.

5. Intangible assets

	2023 First half £m	2022 First half £m	2022 Full year £m
Opening net book amount	1,253.2	1,271.6	1,271.6
Exchange differences	(31.6)	36.7	62.6
Additions	5.8	2.8	11.0
Disposals and write offs	(0.1)	(20.0)	(20.5)
Reclassifications from property, plant and equipment	0.4	0.2	0.4
Amortisation charge for the period	(18.8)	(18.7)	(37.3)
Impairments	(20.8)	–	(34.6)
Closing net book amount	1,188.1	1,272.6	1,253.2

6. Property, plant and equipment

	2023 First half £m	2022 First half £m	2022 Full year £m
Opening net book amount	964.5	988.1	988.1
Exchange differences	(34.2)	57.1	72.3
Additions	75.3	61.0	135.9
Disposals and write offs	(0.4)	(154.8)	(155.2)
Reclassifications to intangible assets	(0.4)	(0.2)	(0.4)
Depreciation charge for the period	(34.3)	(34.8)	(68.6)
Impairments	(1.0)	–	(7.6)
Closing net book amount	969.5	916.4	964.5

During the period the Group received government grant funding of £6.5m (FY 2022: £6.1m) relating to the US cGMP scale up and UK Pharma production capacity expansion projects. Grant income is deducted from the cost of the associated asset within the additions line above.

7. Reconciliation to net debt

	2023 First half £m	2022 First half £m	2022 Full year £m
Net movement in cash and cash equivalents	84.0	673.7	180.5
Net movement in borrowings and other financial liabilities	(142.7)	(145.5)	399.2
Change in net debt from cash flows	(58.7)	528.2	579.7
Non-cash movement in lease liabilities	(4.4)	(5.2)	(13.4)
Non-cash preference shares reclassification	–	(1.1)	(1.1)
Exchange differences	9.0	(30.0)	(37.2)
	(54.1)	491.9	528.0
Net debt brought forward	(295.2)	(823.2)	(823.2)
Net debt carried forward	(349.3)	(331.3)	(295.2)

8. Critical accounting judgements and key sources of estimation uncertainty

The Group's significant accounting policies under UK-adopted international accounting standards have been set by management with the approval of the Audit Committee. The application of these policies requires estimates and assumptions to be made concerning the future and judgements to be made on the applicability of policies to particular situations. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Under UK-adopted international accounting standards an estimate or judgement may be considered critical if it involves matters that are highly uncertain or where different estimation methods could reasonably have been used, or if changes in the estimate that would have a material impact on the Group's results are likely to occur from period to period.

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

Hedge accounting

On the 6 February 2023 the Group agreed to acquire Solus Biotech Co Ltd ('Solus') for a total consideration of KRW350bn, a highly probable future business combination (hedged item). In line with the Group's currency risk management strategy, the currency exposure for the Group, which has a Sterling functional and presentational currency, was managed through the execution of a deal contingent foreign exchange forward contract (hedging instrument). This instrument was designated as a cash flow hedge and therefore hedge accounting was applied in the Group's consolidated financial statements.

The application of hedge accounting for a deal contingent instrument requires significant judgement to determine whether the underlying transaction was highly probable, which is a requirement for the initial application of hedge accounting. The Group's assessment that the underlying transaction was highly probable, and therefore hedge accounting can be applied, is a key judgement. The primary consideration in forming this conclusion was in relation to the required regulatory approval, which was considered highly probable to be achieved based on an assessment of internal and external evidence. This judgement, and the subsequent application of hedge accounting, resulted in a £20.8m FX loss being deferred in other comprehensive income, rather than being recognised in the income statement. During the period, a hedge ineffectiveness loss of £3.1m was recognised in the income statement within administration expenses and reported as an exceptional item as part of business acquisition costs. The forward contract was settled during the period resulting in a cash outflow of £20.8m.

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

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.

The majority of the remeasurement gain in the period relates to the Group's UK pension scheme primarily due to a reduction in the value of the scheme's assets, partly offset by a rise in corporate bond yields increasing the discount rate to 5.2% (31 December 2022: 4.8%). The majority of the Group's retirement benefit asset relates to the Group's UK pension scheme. The UK pension scheme is open to future accrual and therefore the surplus is recognised on the basis that this could be recovered through a reduction in future service contributions.

	2023 First half £m	2022 Full year £m
Opening net retirement benefit surplus	100.1	7.9
Current service cost	(4.8)	(16.2)
Net interest cost	2.7	2.4
Employer contributions	6.5	11.5
Benefits paid	–	0.2
Past service cost	–	3.9
Remeasurements	(10.9)	88.9
Business disposal	–	1.5
Exchange movement	0.4	–
Closing net retirement benefit surplus	94.0	100.1
Total market value of assets	933.1	969.3
Present value of scheme liabilities	(828.5)	(858.4)
Net pension plan asset	104.6	110.9
Post-employment medical benefits	(10.6)	(10.8)
Net retirement benefit surplus	94.0	100.1
Analysed in the balance sheet as:		
Retirement benefit assets	117.0	123.2
Retirement benefit liabilities	(23.0)	(23.1)
Net retirement benefit surplus	94.0	100.1

Goodwill impairment

Management are required to undertake an annual test for impairment of indefinite lived assets such as goodwill. At 30 June 2023, management have performed an assessment for potential impairment triggers across the Group's Cash Generating Units ('CGUs') and Operating Segments and no material impairment indicators were identified, with the exception of Sipo.

The Group tests annually, or more frequently if impairment indicators are identified, whether goodwill has suffered any impairment by comparing the carrying value of the underlying CGUs to their recoverable amount calculated by detailed value in use calculations. These value in use calculations require the use of estimates to enable the calculation of the net present value of cash flow projections of the relevant CGU. The critical assumptions are as follows:

- Terminal value growth in EBITDA (calculated as operating profit before depreciation and amortisation) – set for each CGU with reference to the long-term growth rate for the market and territory in which the CGU operates but not exceeding the Group's long-term average growth rate, estimated at 3%.
- Selection of appropriate market participant real post-tax discount rates to reflect the specific nature of the CGU.
- Specific risk adjusted, real term cash flow projections including key assumptions on revenue growth and operating margins over a 5 year period.

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

An impairment of £20.8m was recorded in relation to goodwill arising on the acquisition of Sipo, a CGU with a carrying value at 30 June 2023 of £62.8m including goodwill (pre-impairment). This impairment principally reflected the decline in the profitability of the business in the period driven by adverse external market conditions, impacting both demand and pricing, which are expected to continue over the medium term. The assumptions underpinning the cash flow projection used in the value in use calculation reflect management's most recent forecast combined with an appropriate view of past experience, specifically that operating margins will improve in the medium to long term and sales growth targets will be achieved resulting in approximately 4.2% (2022: 4.0%) compound average growth rates ('CAGR') at a sales level and 6.5% (2022: 4.0%) EBITDA CAGR over the period.

The key assumptions considered by the Directors in assessing the recoverable amount of Sipo were the EBITDA CAGR, pre-tax discount rate and long-term growth rate. The recoverable amount, and therefore level of impairment charge, is predominantly dependent upon judgements used in arriving at these key assumptions. Although it is not management's current expectation, the impact on the recoverable amount when applying a reasonably possible change in these assumptions would be as follows:

	Assumption	Sensitivity	Increase £m	Decrease £m
Incremental increase/(decrease) in recoverable amount				
Change in pre-tax discount rate by:	12.3%	1.0%	(5.3)	4.7
Change in long-term growth rates by:	3.0%	1.0%	2.1	(2.4)
Change in EBITDA compound annual growth rate by:	6.5%	5.0%	8.2	(10.5)

The above sensitivity analyses are based on a change in an assumption whilst holding all other assumptions constant. In practice, some of the assumptions may be correlated.

9. 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 2022. There have been no changes in the Group's risk management processes or policies since the year end.

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 and other investments, 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.

9. Financial instruments continued

Prior to 2016, the Group did not typically utilise complex financial instruments and accordingly the only element of Group borrowings where fair value differed from book value was the US\$100m fixed rate ten year note that was issued in 2010. In January 2020 the existing US\$100m fixed rate ten-year note matured and was repaid, this was replaced with a new US\$100m fixed rate ten-year note (27 January 2020). On 27 June 2016, the Group issued £100m and €100m of fixed rate notes of which £30m and €30m were repaid in June 2023. 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 2023 £m	Fair value First half 2023 £m	Book value Full year 2022 £m	Fair value Full year 2022 £m
US\$100m 3.75% fixed rate 10 year note	(79.3)	(71.4)	(83.0)	(74.4)
€30m 1.08% fixed rate 7 year note	–	–	(26.5)	(26.3)
€70m 1.43% fixed rate 10 year note	(60.3)	(56.3)	(61.9)	(57.8)
£30m 2.54% fixed rate 7 year note	–	–	(30.0)	(29.7)
£70m 2.80% fixed rate 10 year note	(70.0)	(62.8)	(70.0)	(64.8)
€50m 1.18% fixed rate 8 year note	(43.1)	(39.2)	(44.2)	(40.1)
£65m 2.46% fixed rate 8 year note	(65.0)	(56.3)	(65.0)	(58.1)
US\$60m 3.70% fixed rate 10 year note	(47.6)	(43.3)	(49.8)	(45.4)

10. 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.

11. Post balance sheet events

On 4 July 2023 the Group successfully completed the acquisition of 100% share capital of Solus Biotech Co Ltd 'Solus', a global leader in premium, biotechnology-derived active ingredients for beauty care (Consumer Care sector) and pharmaceuticals (Life Sciences sector) employing 95 people in South Korea. The business was acquired for a total consideration of KRW350bn (approximately £232m) on a debt-free, cash-free basis. The acquisition provides access to Solus' existing biotech-derived ceramide and phospholipid technologies, and its emerging capabilities in natural retinol. This acquisition will significantly strengthen Croda's Beauty Actives portfolio and increases its exposure to targeted prestige segments. Located in South Korea, Solus expands Croda's Asian manufacturing capability and will create a new biotechnology R&D hub in the region. The business generated approximately KRW43bn (approximately £28m) of sales in 2022.

The initial accounting for the business combination is incomplete given the proximity of the acquisition date to the authorisation of these financial statements and therefore disclosures regarding goodwill, fair value of assets and liabilities acquired along with current period revenue and profit have not been provided.

Acquisition-related costs of £7.7m, predominantly in respect of Solus, have been charged to administration expenses in the income statement for the period ended 30 June 2023 and reported as an exceptional item.