Sustainability + Innovation = Growth

Annual Report and Accounts 2021

www.croda.com

CRODA

Purpose

At Croda our Purpose is to use **Smart science to improve lives™**

Mission

Our mission is to be **the world's most sustainable supplier of innovative ingredients**

Commitment

We are committed to being **Climate, Land and People Positive by 2030**

See Sustainability
P30

Strategy

We combine sustainability with innovation to deliver growth

See Our strategy
P20

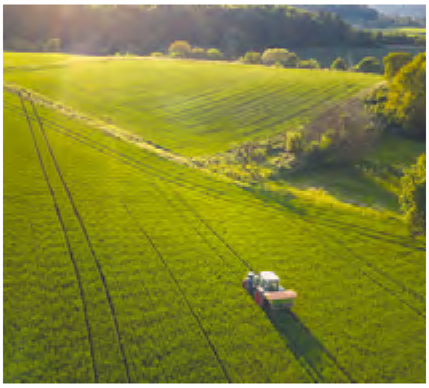
Markets

We are focused on **Consumer Care and Life Sciences markets**

Values

Our shared values of **'Responsible', 'Innovative'** and **'Together'** ensure our smart science improves lives

Sustainability



We have made a bold Commitment to be Climate, Land and People Positive by 2030. By being the most sustainable supplier of innovative ingredients, we will provide solutions to some of the world's biggest challenges while helping our customers achieve their sustainability goals.

See Pursuing our Commitment
P2

Innovation

Innovation is the lifeblood of our business and our success is dependent on our ability to deliver innovative solutions to customers. Our approach to innovation combines our own internal R&D with customer collaboration and open innovation partnerships to accelerate the development of new technologies and disruptive solutions.

See Identifying unmet needs
P4

Growth

Our ambition is to deliver consistent top and bottom-line growth. Through our transition to high growth markets and by investing in sustainability and innovation we are able to leverage the 'Croda difference' to deliver attractive returns for shareholders.

See Delivering for our shareholders
P6

Introduction

Guided by our Purpose, sustainability together with innovation will drive our future growth.

2021 has been an excellent year for Croda. We delivered a record financial performance, made progress against our sustainability commitments, and concluded our strategic review, refocusing the business on fast growth markets of the future.

Highlights

Sales

£1,889.6m

2020: £1,390.3m

Sales growth (constant currency)

+43.2%

2020: +1.1%

IFRS profit before tax (PBT)

£411.5m

2020: £269.5m

Adjusted PBT growth (constant currency)

+56.2%

2020: -4.8%

Ordinary dividend (proposed full year)

+9.9%

2020: +1.1%

NPP % Group sales (constant currency)

36.6%

2020: 27.4%

Scope 1 & 2 emissions intensity ($TeCO_2e$/£m)

193

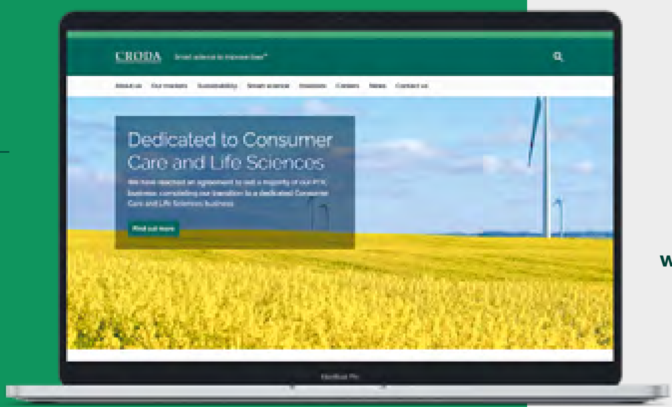
2020: 264

Safety (Total Recordable Injury Rate)*

0.73

2020: 0.58

* TRIR excludes COVID-19 cases and includes acquisition impact. See page 44 for detail.



Contents

www.croda.com

Phil Ruxton and Tracy Sheedy discuss executing on our Commitment and how our people and culture are playing a key role

Phil Ruxton is Chief Sustainability Officer

PR Since launching our Commitment to be Climate, Land and People Positive by 2030, positioning us as the world's most sustainable supplier of innovative ingredients, we have been working hard on the plans and roadmaps to make this a reality.

In line with this mission, we have committed to climate science-based targets (SBTs), becoming only the third major chemical company in the world to have an officially verified plan to reduce carbon emissions in line with the 1.5˚C scenario on our way to becoming net zero by 2050.

With immediate action required to mitigate the worst-case scenarios associated with climate change, leadership and differentiation are now all about execution. Our focus is therefore on delivery, working in partnership with all stakeholders particularly suppliers and customers.

Our strategy is much more broad-based than climate alone, as the United Nations Sustainable Development Goals (SDGs) demand. We are already land net zero, with our crop science ingredients saving more land than is used to grow our bio-based raw materials. We recognise that our strategy will need to adapt in response to the latest science and needs of planet and society. For example, we are investigating our impacts and dependencies on biodiversity and the development of a science-based target for nature.

This year we have engaged all our stakeholders in reviewing our material impacts. The insight gained has focused our attention and encouraged us to continue our ambitious journey to become Climate, Land and People Positive by 2030.

TS Croda has a unique culture which combines our heritage with a diverse and global footprint. Our values are a manifestation of this; we encourage our people to be 'responsible' and 'innovative' and to work 'together'.

We are responsible and 'do what we say we will do'; delivering on our promises is something which is evident in our financial and non-financial performance this year. This year we have reached our target of ensuring all employees earn a Living Wage globally and continue to enjoy largely positive scores in our employee engagement surveys.

As a leading innovator we encourage the broad range of thinking made possible in a company that values diversity, enhancing the solutions that we deliver for customers and the communities that we serve. We are pleased to have exceeded both the Board gender and ethnic diversity ambitions of the Hampton-Alexander and Parker Reviews for the start of 2022 and we also increased the proportion of leadership positions held by women to 36% this year.

At Croda, we share a clear sense of Purpose to use our Smart science to improve lives™ that ensures everyone pulls together to achieve our goals. Read more about our culture and diversity and inclusion on page 36.

Tracy Sheedy is Group Human Resources Director

See Delivering value through our culture
P36

Combining science and sustainability at Alban Muller

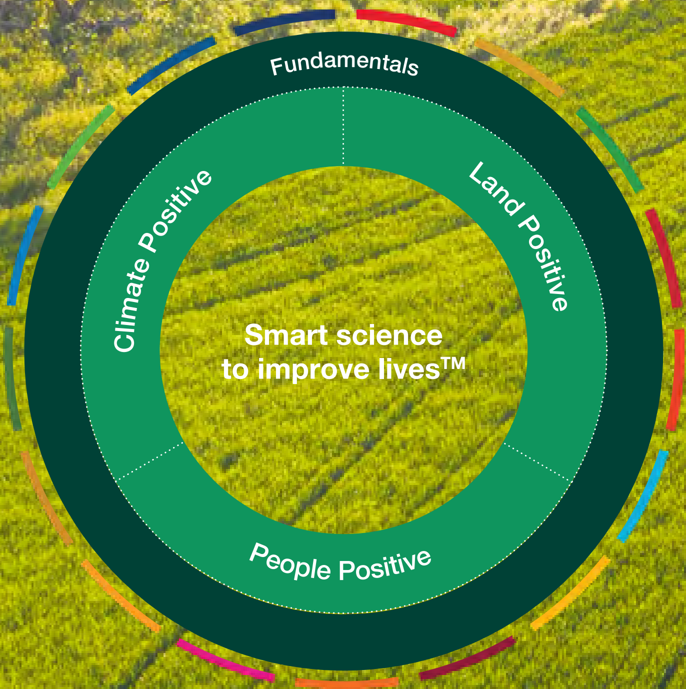
Through our Sederma business we are the leading innovator in the skin care market and the number one supplier of anti-ageing ingredients. We are also a leader in natural extracts sourced from plants, under our Crodarom brand. This year we acquired Alban Muller, a privately owned company that combines science and natural extracts, broadening the natural ingredients offering in our Beauty Actives business.

Alban Muller's natural active and functional ingredients create a significant growth opportunity to meet changing consumer requirements in a skin care market that is growing 9% per year. The acquisition is also a good example of where we expect to continue to allocate capital in consumer markets.

Alban Muller product Cytokalmine™ is a natural concentrate for sensitive skin with proven soothing and antioxidant effects. This new product, launched in 2021, is 100% naturally derived from by-products of pomegranate food production. The production of natural active ingredients using locally sourced by-products is a good example of how Alban Muller delivers beauty ingredients that are more sustainable than alternative products.

Christiano Lubrano, Research & Development Director at Alban Muller, said: *"The integration with Croda presents the perfect opportunity to combine our scientific botanical knowledge with Croda's existing expertise to create new natural ingredients for customers; both more innovative and natural."*

Sustainability + Innovation = Growth



Climate Positive:

We will continue to reduce our carbon footprint and increase our use of bio-based raw materials, whilst the benefits in use of our ingredients will enable more carbon to be saved than we emit through our operations and supply chain.

People Positive:

We will apply our innovation to increase our positive impact on society. We are improving the lives of our own employees and people around the world by developing ingredients to improve health and wellbeing as well as encouraging and promoting diversity.

Land Positive:

Our products will enable more land to be saved than is used to grow our bio-based raw materials. Our innovation will help customers to protect biodiversity and to mitigate the impact of climate change and land degradation, increasing the availability of land suitable for growing crops.

Fundamentals:

Our social licence to operate is built on trust and is the foundation of everything we do. We consider all stakeholders in our ecosystem and strive to adopt best practices in environment, labour and human rights, safety, ethics and sustainable procurement.

See Sustainability
P30

Identifying unmet needs

Nick Challoner provides insight into how our dynamic innovation model creates disruptive technologies

Nick Challoner is Group Chief Scientific Officer

NC We are the leading innovator in the markets in which we operate, growing by creating new market and technology niches with our novel product and service offerings.

By selling direct to customers and collaborating with them at our innovation centres around the globe, which are located close to customers, we gain a detailed insight into their current and future challenges, enabling us to identify new opportunities for growth.

Our innovation ecosystem is unique with our R&D advances increasingly driven by our partnerships. These partnerships with leading scientists in universities and SMEs enable us to access specialist, world class expertise and facilities. We now have more than 500 open innovation partners working with us on over 100 active projects at any one time.

Our partners contribute to the high proportion of New and Protected Products (NPP) we sell as well as the continued differentiation of our portfolio. Through our strategy, we are becoming a more knowledge-intensive company, with recent acquisitions contributing to the strong increase in NPP that we have seen this year.

Together with our partners, we are developing novel ingredients that deliver better results for our customers with a reduced impact on the planet. Each project aims to either improve the sustainability of our products, raw materials and manufacturing processes, or create new ingredients that deliver sustainability benefits in use to our customers and their consumers. Even better if they achieve both.

For example, we work with partners to help access the latest thinking in biotechnology, drawing on recent advances in the ability to harness the biological world. Biotechnology can help meet growing consumer demand for more sustainable and personalised products, and so has the potential to transform chemical industries.

One challenge is that innovation often happens in pockets, disconnected from the real-world impact. Croda's cross sector expertise and ability to look across industries provides us with a unique opportunity to connect disruptive innovation in areas such as biotech with tangible business benefits.

See Key Performance Indicators for NPP metric
P45

Driving innovation in the crop care market

Agriculture is responsible for approximately 20% of carbon emissions globally, so it is not surprising that the environmental impact of the agricultural industry is becoming a high-profile issue. While the industry has traditionally relied on chemical fertilisers and pesticides, the potential of biologics in crop care is now better understood. The role of predators to control insects in greenhouses is well established but micro-organisms and naturally occurring compounds also have potential as biostimulants and biopesticides.

Through Croda's acquisition of the Incotec Seed Enhancement business in 2015 and the Plant Impact Biostimulants business in 2018, we are well placed to address some of the challenges in the adoption of biologics. These include the survival of micro-organisms before use, compatibility with application methods and variations in environment.

We have developed new technology, which when applied to soybean seeds results in stimulation of shoot and root growth, and increased yields. We are now evaluating this biostimulant in different seed application technologies. In collaboration with Royal Holloway University of London, we are also further developing seed enhancement as the optimal method of microbial application. We are also using Artificial Intelligence (AI) to address the big data challenge of optimising biologics for specific environments.

Carola Peters (pictured, right-hand page), a research scientist at our Incotec Seed Enhancement business in the Netherlands, said: *"Over time a larger proportion of seeds will be treated before they are sown and crops will be sprayed less."*

See Sector review: Life Sciences
P26

Over time a larger proportion of seeds will be treated before they are sown and crops will be sprayed less.

Carola Peters,
Research Scientist, Incotec Seed Enhancement

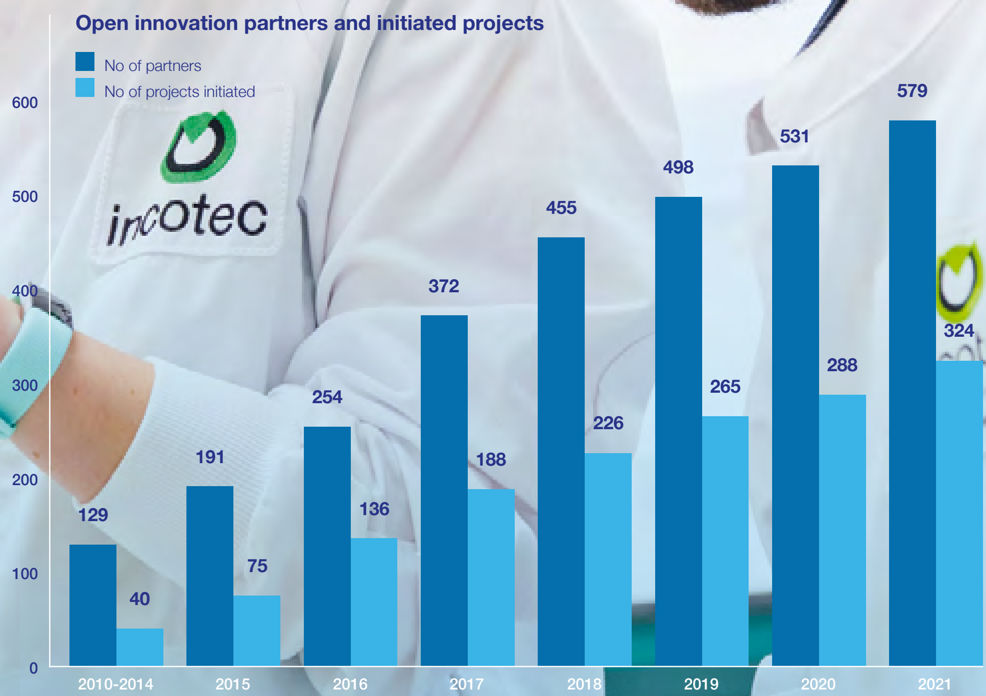
Sustainability + Innovation = Growth

We increased innovation spend in 2021 by over

50%

88%

of new products directly contribute to our priority SDGs



Anthony Fitzpatrick and Mark Robinson discuss inorganic opportunities and organic investment to deliver our strategy

Mark Robinson is President Global Operations

MR With a focus on flexible manufacturing processes, Croda's operations differ from most of our peers, ensuring that our business remains profitable and cash generative even in the most challenging economic conditions. In the more favourable environment we have seen this year, we have delivered a record performance, benefitting from significant investment in previous years, notably in sustainability.

The demands of this rapid recovery combined with the ongoing challenges of managing through COVID-19 created added challenges to our operational teams. To our employees, thank you for stepping up to the challenges and making a significant contribution to our results and delivering for our customers.

We are reinvesting for growth, particularly disciplined organic investment in new capacity, product innovation and attractive geographic markets such as Asia. We are focused on consumer and life science markets which provide the opportunity to deliver stronger and more profitable growth.

At an operational level, this means building on our position as a sustainability leader including executing against the decarbonisation road maps we will have in place for all of our major sites by the end of 2022. In addition, the top priority in Life Sciences is to scale our world-leading delivery systems for patient health.

COVID-19 has demonstrated the benefits of local manufacturing, and we have identified new projects to build operational flexibility and resilience in key countries such as China.

See Business model
P16

AF We complement organic investment with innovation-rich acquisitions capable of delivering higher, profitable growth under Croda's ownership. The strength of our performance in 2021 reflects this consistent strategy with the prior year acquisitions of Avanti and Iberchem making a significant contribution.

Avanti has enabled us to play an important role in the roll out of COVID-19 drugs and vaccines, something that we are very proud of. This platform opens up significant opportunities in next generation areas such as mRNA and gene therapy.

Iberchem's focus on higher-growth emerging markets will drive significant value in the coming years. Integration is progressing well and we are on track to realise the expected revenue synergies by 2025, further enhanced by our add-on acquisition of Parfex, a premium fragrance business. In 2021 we also acquired Alban Muller, boosting our natural ingredients portfolio in Beauty Actives.

In May, we announced a strategic review of our Performance Technologies and Industrial Chemicals (PTIC) businesses to determine the best future ownership structure. The sale we announced in December 2021 for the majority of PTIC provides a strong new supportive owner for its future growth and is also a significant milestone in Croda's transition to a dedicated life science and consumer business.

We will continue to target exciting innovation-led acquisitions to continue our journey as a knowledge-based business, with a selective focus on Life Sciences and at the top end of Consumer Care.

Anthony Fitzpatrick is President Corporate Development and Performance Technologies & Industrial Chemicals

Investing in mRNA

As the core of our lipid systems capability within the Health Care business, Avanti is primarily focused on developing innovative lipid-based products of unparalleled purity to address specific medical challenges that are not resolved by current technology.

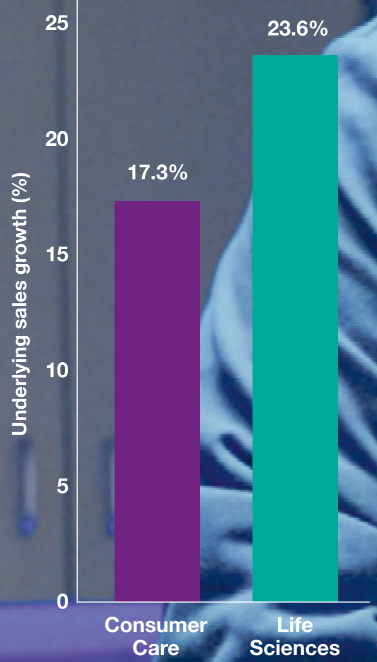
The lipid systems and synthesis expertise we bolstered with the Avanti acquisition has contributed approximately US$200m of sales in 2021, primarily for our principal vaccine customers. With over 200 lipid-based vaccines and drugs in clinical trials, and a similar number in research, there is a huge opportunity for us to move to the forefront of the biologics delivery market.

We have reinforced our market leading position through R&D investment and innovation augmented by £60m of capital investment since we acquired Avanti in August 2020. This investment expands our GMP manufacturing and quality assessment facilities, increasing production capacity for existing projects and also enhancing our innovation pipeline for new projects.

The scale of the opportunity in future mRNA and gene therapy applications is reflected in the market size which has grown rapidly since the onset of COVID-19. We are investing to maintain and enhance our first mover advantage. Justin Martin, Development Scientist at Avanti (pictured, right-hand page), said: *"Backed by our extensive history of supplying high quality lipids for clinical research and small-scale commercial applications, we were able to meet the challenges associated with large-scale commercial manufacture of novel lipid components critical to the formulation of life-saving COVID-19 vaccines. With the onset of widespread use of lipid system technology in future therapeutics, I am thrilled to see what the future holds for lipids in worldwide health care."*

Sustainability + Innovation = Growth

Underlying sales growth versus 2019 (excluding lipid systems)



Investing for future growth

£1.2bn
invested in acquisitions and capacity expansion in the last two years

Annual organic capital investment increased by 31% in 2021 to almost
£160m

£70m
invested in 2021 to scale up manufacturing capacity for our three patient health care platforms

A record year driven by the commitment of our people

"Croda has always had a unique culture, built on customer intimacy and innovation with an entrepreneurial spirit."

Anita Frew
Chair

Anita Frew
Chair

After what has continued to be another challenging year for businesses around the world, I am pleased to report that Croda has delivered a record performance. This reflects strong growth in our existing business, significant benefits from recent acquisitions and our Health Care business performing exceptionally well.

The Croda team has met the demands of a rapid global recovery, combined with ongoing challenges presented by COVID-19. Customer demand and cost inflation have been at levels we have not seen for a decade; at the same time COVID-19 restrictions have remained in place in many countries around the world. This has presented many challenges for our people, carefully managing both employee wellbeing and customer expectations.

As always, our clarity of Purpose has been our guide, ensuring we deliver for our customers, whilst always looking after our business partners and one another. Our success is made possible by our people, who have risen to the challenges the year has presented. Their hard work, dedication and customer focus have been exceptional, and I want to thank all of our employees for their contribution to a successful year.

A Purpose-driven company

Our strategy will continue to evolve but our Purpose – Smart science to improve lives™ – will remain constant, guiding the choices we make. Our Purpose is illustrated by the contribution we are making to COVID-19 vaccination programmes around the world, supporting over 150 COVID-19 projects in more than 30 countries. This support has often involved considerable commitment from our people, not least from colleagues on our graduate programme who put personal lives on hold to travel to Alabama and help produce lipid systems that continue to play such a key role in the fight against the pandemic.

Sustainability as a strategic priority

In line with our Purpose, we have made a bold Commitment to be the world's most sustainable supplier of innovative ingredients. Our focus is now on execution, working with our suppliers and customers to ensure we are Climate, Land and People Positive by 2030. Only by working in partnership can we achieve our goals, and we recognise that the strength of our relationships with others helps drive our success and our positive impact on the world around us. During 2021, our communities also benefited from our longstanding volunteering programme and educational outreach. In addition we established the Croda Foundation, which is already helping over 50 million people by supporting vaccine infrastructure projects globally, extending the positive impact we are making.

Sustainability has been a strategic priority for Croda over more than a decade, influencing how we develop our business and product portfolio and our priorities for investment. Climate change, biodiversity loss and rising inequality are now changing consumer demands, making sustainability as important to consumer choice as performance. This is providing us with opportunities to leverage our leadership position in sustainability, to help our customers meet these changing consumer needs.

Board members engage regularly with our Sustainability Committee to track progress and were represented at the Executive review of our sustainability strategy in October (see page 65). When reviewing progress, I am particularly struck by the level of our employees' engagement around this topic and the ownership across Croda which will ensure we continue to achieve our goals.

A culture where we put people first

Croda has always had a unique culture, built on customer intimacy and innovation with an entrepreneurial spirit. Promoting this 'One Croda' culture is important to our long-term success, as it enables us to operate a decentralised model where decisions are taken as close to the customer as possible, ensuring that we are more agile than our competitors, whilst delivering the governance and consistency we expect across Croda. Our values, which we have worked hard to articulate over the last two years, are to be 'responsible', 'innovative' and to work 'together'. We expect managers to put people first, irrespective of whether they are colleagues or partners, and all of our people to look after one another.

In 2021 we implemented an eight-point plan to support the wellbeing of our employees facing the combined challenges of COVID-19 and a rapid recovery in demand. The wellbeing and engagement of all employees is a cornerstone of our success, and I am delighted that we have been able to adopt the Living Wage in 2021 for all employees. Employee share ownership remains at impressive levels, at over 80% in the UK and 60% internationally. We have augmented this with a new 'Free Share Plan', under which employees who do not participate in other bonus schemes were awarded ten shares in 2021 and will continue to receive free shares when those schemes pay out.

Putting lives on hold to meet the COVID-19 vaccine challenge

Through our contribution to various COVID-19 vaccination programmes we have been able to play our part in helping the world emerge from the COVID-19 crisis. Our contribution required the rapid ramp-up of lipid production capacity in Alabama and a project to expand production volumes that would typically take two years was completed in a matter of months. While it was Avanti's deep knowledge of lipid drug delivery combined with Croda's expertise in operational scale-up that made the project possible, it was our people who made it happen. Our teams worked around the clock running three shifts a day to produce the required quantities of lipids. The project involved diverting resources from around the business to support lipid production, including employees from Croda sites in the US and UK who put their lives on hold and travelled to Alabama for five months. Many of these seconded employees were graduates, with a rotation added to our graduate programmes. Our people worked tirelessly, exemplifying the Croda values, to deliver for our customers. The immediate impact of this work is obvious, but beyond this the experience and knowledge gained will aid their development as they progress in their careers.

Ashlea Taylor-Hughes, pictured, a Croda research scientist from Cheshire, UK, who postponed her wedding due to the COVID-19 pandemic and spent time on secondment in Alabama, said: *"It was scary to come out here for five months but, just thinking of all the good that it would do, I was completely up for it."*

Promoting executive and workforce diversity

At the beginning of the 2021, we published a Board diversity and inclusion (D&I) policy and communicated our commitment to greater diversity within our business. We believe that the diversity of our people – in terms of ideas, skills, knowledge, experience, ethnicity, gender or any other characteristic – is very important for the continuing long-term success of the Company. We will report annually on the progress we are making. See pages 37 and 61 for further details.

The Board recognises the importance of developing diversity in senior management roles and oversees the objective of achieving gender balance in all leadership roles by 2030 and the doubling of the number of women in leadership positions. In this year's submission to the Alexander Hampton review, we were pleased to report that 36% of leadership positions were held by women. We will also develop a target aligned to increasing the number of ethnically diverse employees in executive roles by the end of 2022 and in leadership positions by the end of 2024.

Croda has not historically collected company-wide information about employee ethnicity. However, we understand the importance of having sufficient data to make good decisions about D&I and how this will enable us to track our progress. This year we conducted our first global diversity survey and are using the results to develop an action plan to drive improvements. The results are reported in the Culture section of this report on page 37, where you can read more about our approach to D&I and the work of our global steering committee. We expect to be able to implement routine monitoring and disclosure of employee ethnicity from 2023 for the UK and globally from 2024.

Evolved Board composition to reflect our ambition

This commitment to diversity applies to the makeup of the Board, ensuring it is well equipped to lead the business effectively, embraces new ideas and makes good use of differences in experiences, backgrounds and perspectives to satisfy all the different stakeholders we have as a global organisation.

In September 2021, Julie Kim was appointed as a Non-Executive Director (NED), bringing 25 years' experience of health care markets across Europe, Asia and Latin America. Julie is President Plasma-Derived Therapies at Takeda Pharmaceutical, a global, R&D driven biopharmaceuticals company. In early 2022, we welcomed Nawal Ouzren, CEO of biopharmaceutical company Sensorion, to the Board as a NED, adding further health care expertise through her first-hand experience of biologics and novel gene therapies.

Both appointments add relevant experience as we look to access higher growth markets in health care, and in regions beyond Europe and North America, such as Asia. They also bring even greater diversity to the Board in terms of gender, ethnicity, nationality and tenure. Overall, I am pleased to have fulfilled our commitment to meeting the requirements of the Parker Review on ethnic diversity and to achieving full gender balance on the Board.

I am confident that the diversity of thought and experience we have around the boardroom table will ensure we are able to provide effective support and guidance as Croda continues to focus on the fast-growth markets of the future. Despite the challenges presented by COVID-19, as a Board we have been able to continue our programme of engagement with employees across Croda, including virtual visits to Avanti and Iberchem, the businesses that we acquired in 2020. I would like to thank all Board members for their support and hard work throughout 2021.

Accelerated strategic progress in a transformational year

Our agile approach and resilient business model have allowed us to look beyond the immediate COVID-19 pandemic, with the Board and Executive Committee working together on our strategy driving sustainability and innovation to deliver growth.

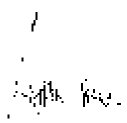
In December 2021, we announced the sale of the majority of our Performance Technologies and Industrial Chemicals businesses to Cargill, the largest private company in the United States. This divestment, due to complete in Summer 2022, will progress Croda's transition to a pure-play Consumer Care and Life Sciences company, markets in which we can deliver on our Purpose of using Smart science to improve lives™. As Steve Foots, our Group Chief Executive, outlines further in his review on page 10, this focus on Consumer Care and Life Sciences will enable us to deliver consistent sales growth and an even stronger profit margin.

We committed to communicating openly with the employees of our Performance Technologies and Industrial Chemicals businesses during the strategic review, recognising that it was a period of uncertainty. Cargill is a company with a distinguished history and I am confident that our employees can look forward to a bright future under its ownership.

Committed to generating value for all stakeholders

The divestment will allow us to focus our resources on delivering sustainable solutions and scaling our consumer, health and crop care technologies. We have a clear capital allocation policy, with a focus on organic investment, given the exciting growth opportunities we see in the future in these markets. We will also provide regular returns to shareholders, invest in complementary acquisitions and retain our balance sheet strength. The Board is proposing a full year dividend for 2021 of 100 pence per share, representing growth of 10% over 2020, a year in which we were one of the few companies to continue to increase the dividend as we managed the impact of COVID-19.

2021 has been an excellent year for Croda in which we have delivered a record financial performance and strong progress against our non-financial targets. We are becoming a dedicated Consumer Care and Life Sciences company where our leadership in sustainability and innovation will deliver further profitable growth. With our clear Purpose, strong culture and committed workforce, we look forward to the future with confidence.



Anita Frew
Chair

Record financial performance – strategy executed with agility

1
Record financial performance

2
Significant benefit from recent acquisitions – £58m additional operating profit and stronger growth platform

3
Strategic transition to pure-play Consumer Care and Life Sciences company with accelerated investment

Steve Foots
Group Chief Executive

Creating a pure-play Consumer Care and Life Sciences company

2021 has been an outstanding year for Croda, with record financial results and excellent strategic progress. This has been enabled through the accelerated implementation of our strategic priorities, increased investment in innovation and growth, and a broader global recovery in demand.

Our excellent strategic progress during the COVID-19 pandemic has included progressing our transition to a pure-play Consumer Care and Life Sciences company. Our 2020 acquisitions of Avanti and Iberchem, which created new growth platforms in our target markets, have been followed by our recent agreement to divest the majority of our Performance Technologies and Industrial Chemicals businesses ('PTIC'). This will release more capital to reinvest in faster growth, higher return markets, positioning us to deliver more consistent sales growth and an even stronger profit margin.

This strategic progress is consistent with our Purpose of using Smart science to improve lives™. The importance of our sustainability Commitment, made in 2020, has come to the fore, with consumers everywhere seeking more sustainable products and customers needing Croda to help decarbonise their supply chains. Our part in helping produce COVID-19 vaccines is a proud example of our smart science in action. Our capabilities in sustainability and innovation will drive our future growth. Croda is becoming a more knowledge intensive business, investing more in commercialising R&D, expanding emerging market exposure and increasing the value captured from our products. We are focused on the fast growth markets of the future, making bigger and bolder bets to expand our leadership positions and drive significant value creation.

The results of this strategic action can be seen in 2021's performance. It was a record year for sales and profit, with every part of the Group performing well. The strength of the 'existing' Croda business was clearly demonstrated, with underlying sales growing by 26% and underlying growth in adjusted operating profit of £116m over 2020. Consumer Care led the way, with a strong recovery in Personal Care. Alongside this, we realised significant benefits from recent acquisitions in Consumer Care and Life Sciences, delivering £58m of additional adjusted operating profit within the first year post-acquisition. Our 2020 acquisition of Avanti has helped to establish the lipid systems platform in Health Care, with approximately US$200m of sales in 2021, primarily to our principal vaccine customers. We deployed more capital and resources to scale our consumer, health and crop care technologies. We increased innovation spend by over 50% on 2020 and the proportion of New and Protected Products (NPP) from 27% to 37% of total sales. We increased annual organic capital investment by 31% to almost £160m; reflecting our successful 'buy and build' approach. This has allowed us to unlock the potential of Avanti and Iberchem, acquiring adjacent technology platforms and then scaling them through organic investment.

To deliver these record results, our colleagues have risen to the dual challenges of responding to a rapid recovery in customer demand whilst managing ongoing COVID-19 restrictions. Combined with global disruption affecting many industries, supply chain management has been challenging but, thanks to the efforts of our global team, we have managed to supply the increased demand whilst limiting the impact on customer service. I am proud that we have continued to support our stakeholders and keep our colleagues safe, and I would like to thank everyone at Croda for their commitment.

Record financial results

In 2021, reported sales grew by 36% to £1,889.6m (2020: £1,390.3m). Underlying sales were up 26% and acquisitions added 17% (both at constant currency), while stronger Sterling saw an adverse impact from currency translation of 7%. Notably, underlying sales were 18% ahead of 2019 (excluding sales of lipid systems introduced since 2019, for better comparability), demonstrating significant growth against pre-pandemic levels. 2021 also saw the most significant period of raw material cost increases in over a decade, up by 17% in the underlying business. With full cost recovery achieved through Croda's powerful operating model, alongside a strengthening product mix, this helped drive underlying sales price/mix 17% higher year-on-year. Despite higher prices, most markets globally saw strong demand recovery, and underlying sales volume rose 9%.

Strong demand and the faster growth of higher value-add technology platforms across Life Sciences and Consumer Care resulted in a record profit margin for the Group. Return on sales rose 180 basis points to 24.8% (2020: 23.0%). In Life Sciences, the highest growth was in the patient health care platforms, which increasingly focus on producing high value products. Personal Care returned to good growth within the Consumer Care sector and a recovery in Performance Technologies markets benefitted operating leverage. The combination of sales growth, acquisition and improved margin saw reported profit before tax (on an IFRS basis) increase by 53% to £411.5m (2020: £269.5m), while adjusted profit before tax increased by 48% to a record full year result of £445.2m (2020: £300.6m) and was 38% higher than 2019. With adjusted earnings per share 43% higher, the Board has proposed a rise of 10% in the full year ordinary dividend, completing a 30-year record of consistently increasing the annual ordinary dividend.

Cash generation in 2021 supported an increase in working capital, reflecting the higher costs of raw materials and a tactical increase in inventory to

Reported sales (2021)

+36%

See Finance review
P46

support customer service levels, and an increased allocation of capital investment to the strategic growth markets of Consumer Care and Life Sciences, as part of the divestment of the majority of PTIC. Health Care is a key investment focus for us, with over £70m invested to expand our three patient health care platforms, including new capacity for speciality excipients in therapeutic drug delivery, further build out of the lipid systems platform and expansion of the fast growing vaccine adjuvant platform.

We also committed funding to create a new combined fragrance and Beauty Active facility for Consumer Care, to accelerate sales growth in China, and a new proteins capability in Home Care. In R&D, we invested £5m in expanding innovation centres and in disruptive process technologies. We supplemented this organic investment with the acquisition of adjacent technologies, acquiring two businesses in Consumer Care which are accelerating our transition to natural raw materials. In March, we acquired natural Beauty Actives specialist Alban Muller for €25m and in June we completed on Parfex for €45m, strengthening Iberchem's position in fine and natural fragrances.

Growth across all regions and sectors

All geographic regions delivered good sales and profit growth. Consumer recovery was strongest in North America, with Asia and Europe also seeing double digit percentage growth in underlying Consumer Care sales. Latin America saw excellent Crop Care sales and all regional markets saw good progress in Performance Technologies. Health Care sales grew across the globe, with Europe and North America benefitting from the lipid systems platform.

A stronger Consumer Care business

2021 saw the creation of the Consumer Care sector, comprising Croda's leading global position in Personal Care, the recently acquired Iberchem fragrances and flavours (F&F) business and Home Care. Consumer Care delivered an excellent sales performance in 2021, up 45% in reported terms, with underlying sales 18% higher. This was supplemented by 35% growth from acquisitions and partly offset by adverse currency translation of 8%. Adjusted operating profit increased by 29% (and by 26% on an IFRS basis), with return on sales of 24.7% (2020: 27.8%); the latter reduction reflected dilution from the acquisition of Iberchem, with F&F industry margins structurally lower than those of Personal Care. A strengthening product mix overall saw profit margin improve in the second half year.

After a steady recovery in the second half of 2020 from the negative impact of COVID-19 on 'going out' sales of actives and cosmetics, Personal Care performance improved markedly in 2021. This was led by a resurgence in consumer demand for our innovative, high value Beauty Actives products. In previous years, Personal Care performance has been held back by softer growth in our heritage Beauty Care formulation ingredients, particularly in North America and Asia. Beauty Care enjoyed a return to growth in 2021, benefitting from customer restocking and innovative sustainability-driven ingredients, including bio-based surfactants from the US plant, which was fully operational from the end of the first quarter. Improved demand continued through the year, resulting in 2021 Personal Care underlying sales 15% above 2019 pre-pandemic levels and a return on sales of 30%. Growth continued in Home Care, reflecting customer interest for sustainable products from our US ECO plant and excellent demand for Croda's innovative fabric care offering.

In Consumer Care, we are already recognised as the leading innovator in ingredients for the personal care and home care markets. Our acquisition of Iberchem has given us a similar platform in F&F, with innovation at the heart of its business, offering customers on-trend fragrances, particularly for emerging markets. We are delivering the first cross-selling synergies from Croda's global presence, including the launch of Iberchem fragrances into the large Brazil market, leveraging Croda's local operation. With lower vaccination rates, emerging markets have seen softer demand due to COVID-19, which has constrained sales in the short term, but the F&F business still delivered double digit percentage growth in 2021, including the mid-year acquisition of Parfex.

Rapid expansion in Life Sciences

With an excellent 2021 performance, Life Sciences now rivals Consumer Care in scale. Sales grew 46% in reported terms in 2021, with underlying sales over 40% higher. This was supplemented by over 13% growth from acquisition in the first year of ownership and was partly offset by adverse currency translation of 8%. Adjusted operating profit increased by 67% (and by 79% on an IFRS basis), with return on sales reaching 36.4% (2020: 31.7%). As noted at the half year, achieving this level of growth and profit improvement in such a short period placed significant demands on the business and, as anticipated, the margin level moderated in the second half of the year, as we invested in additional people and brought new capacity on-stream to future-proof this growth.

Life Sciences is leveraging in-house developed and acquired technologies, building further scale to deliver customers' drug, vaccine and crop science products. It is moving into faster growth, higher value/lower volume niches. In 2021, the strongest growth was seen in the Health Care business, with reported sales up 80% year-on-year. This was driven by our focus on patient health care platforms. Whilst much of this growth was delivered by Avanti and the scale-up of its exciting lipid systems platform by Croda's UK Health Care site, resulting in around US$200m (£145m) of sales to COVID-19 mRNA vaccines, speciality excipients and vaccine adjuvants also grew by over 40%. With continued investment in these platforms, double digit percentage organic sales growth is expected to continue into the medium term.

Our Health Care business has had outstanding early success with its involvement in COVID-19 vaccines, but even more importantly, we have built a foundation for Croda in biopharma drug delivery. Whilst the majority of lipid system sales in 2021 were to our principal COVID-19 vaccine customers, opportunities in other drug and vaccine customer projects continue to develop. Across our three patient health platforms, we secured 130 new customers and 250 new programmes, two thirds of which were for non-COVID applications, including nucleic acid therapeutic drugs and vaccines (such as mRNA). We expect to see an ongoing expansion in the range of applications for lipid systems in vaccines and therapeutic drugs, as this exciting Health Care technology develops through clinical trials to commercial customer product launches in the medium term.

Crop Protection delivered double-digit percentage sales growth, reflecting strong demand across crop science customers, particularly in the second half of the year. This included significant growth in sales to non-tier one customers who now represent more than 50% of revenue. By contrast, Seed Enhancement growth was subdued, with slower sales in Europe and China.

A new future for Performance Technologies

The recovery of Performance Technologies strengthened during 2021, with sales growth reflecting a recovery in industrial end markets and sustainability-driven demand across our innovative product applications. Sales grew 18% in reported terms, with underlying sales 24% higher, partly offset by adverse currency translation of 6%. Adjusted operating profit increased by 32% (and by 38% on an IFRS basis), with return on sales improving to 14.7% (2020: 13.1%), as higher sales volume positively impacted operating leverage. Second half margin was notably stronger than the prior year.

In December 2021, we agreed to sell the majority of the PTIC businesses to Cargill Inc., for an enterprise value of €915m (approximately £778m). The business to be divested accounted for 77% of PTIC's 2021 reported sales and comprises five manufacturing facilities, together with associated laboratory facilities and sales operations. We are currently working on the process to separate the two businesses, with completion expected in summer 2022. The consideration includes the sale of 100% of Croda Sipo in China, a joint venture which Croda currently manages and in which it has a 65% shareholding. If Croda's 100% ownership of Sipo cannot be realised, Sipo will be excluded from the PTIC sale, reducing the consideration by €140m. The overall divestment is subject to customary regulatory approvals but is not subject to shareholder approval. Under Cargill's ownership, the divested business and its talented workforce can look forward to a bright future.

Croda's retained business within PTIC, which accounted for 23% of 2021 sales, will form a new Industrial Specialties sector. This will play a key role supporting the Consumer Care and Life Sciences sectors. The divestment is a key step in delivering Croda's transition to a pure-play Consumer Care and Life Sciences company.

We use a number of Alternative Performance Measures (APMs) to assist in presenting information in an easily analysable and comparable form. We use such measures consistently at the half year and full year and reconcile them as appropriate. Adjusted results are stated before exceptional items and amortisation of intangible assets arising on acquisition, and tax thereon. Constant currency results reflect current year performance for existing business translated at the prior year's average exchange rates and include the impact of acquisitions. Underlying results reflect constant currency values adjusted to exclude the impact of acquisitions and disposals in the first year of ownership. All comparators are full year 2020 unless otherwise stated. Sector results for full year 2020 have been restated to reflect a 2021 change to the Group's reporting structure.

Strategy: driving growth through sustainability and innovation

As a result of the strategic moves that we have made over the last 18 months, including the acquisitions of Avanti and Iberchem, and the agreement to divest the majority of our industrial businesses, Croda is now becoming a pure-play business, focused on life science and consumer markets. These markets have reduced cyclicality, are faster growth, deliver high margins, are capital and carbon light, and leverage innovation, IP and new technologies.

In focusing on these markets, Croda is combining leadership in sustainability with market-leading innovation to deliver profitable growth. Sustainability trends are developing rapidly in these markets, driven by consumer demand for products which do not harm the planet and meet growing trends for clean, bio-based solutions. In addition, our customers have set their own sustainability goals and need Croda, as part of their supply chains, to deliver products created through sustainable ingredients, ethical sourcing, greater ingredient transparency and lower-carbon manufacturing. Regulatory change is also driving companies to move to net zero and Croda has responded by developing clear manufacturing decarbonisation plans during 2021.

Our innovation ecosystem sees R&D driven by increased organic investment and highly productive external innovation partnerships. We are increasing the proportion of NPP that we sell and formulate into customer products. This dynamic innovation engine enables us to both create new market niches through our novel product offerings and win business in existing markets by providing sustainable alternatives to incumbent petrochemical supply. Through innovation, we deliver our strategic objective of consistent top and bottom line growth, with profit growing ahead of sales, ahead of volume.

Delivering our sustainability Commitment

Croda was built on a heritage of using science to turn renewable raw materials into innovative ingredients. Today, our Purpose is to use Smart science to improve lives™. We have made a bold Commitment to be the world's most sustainable supplier of innovative ingredients. This is both the right thing to do and also what our customers and consumers are seeking. Accelerating the transition to sustainable ingredients makes clear commercial, as well as ethical, sense. Our focus is now on execution, working in partnership with our suppliers and customers to achieve our Commitment to be Climate, Land and People Positive by 2030.

> **"Croda is combining leadership in sustainability with market-leading innovation to deliver profitable growth."**

On our journey to becoming Climate Positive, in 2021 we became only the third chemical company globally to have our 1.5°C target verified by the Science Based Targets initiative (SBTi). This commits us to delivering improvements in line with the objective to limit global temperature rises to no more than 1.5°C above pre-industrial levels, the most ambitious SBTi pathway. We are supporting our site decarbonisation roadmaps through investment within our existing capital budget and by considering opportunities to decarbonise with every capital investment decision. The divestment of the majority of PTIC will make Croda less carbon intensive and we will re-baseline our Climate targets to maintain the challenge we have set. PTIC has significant use of bio-based organic raw materials and the divestment will reduce the Group's proportion of bio-based organic raw materials from 69% in 2021 (2020: 67%) to around 52% post-divestment, but we will retain our bio-based target of 75% by 2030.

In becoming Land Positive, the land saved using our crop care technologies will exceed any increase in the land used to grow our raw materials by at least double. We are also developing Nature Positive targets ready for when the future science-based target for nature is published.

In our People Positive objective, we focus on using our smart science to improve lives globally, support our communities and improve the experience of the people we employ. 2021 saw the Health Care business contribute to the development of 15 of the 24 vaccines prioritised by the World Health Organisation, including new projects for HIV and Ebola vaccines. To help our communities, in 2021 we established the Croda Foundation, providing £1m of annual funding. In addition, to reflect the progress made in our Health Care business, we made an extra funding award of £2m in 2021, to improve vaccine and health infrastructure. The first projects funded will help deliver vaccinations to over 50 million people by supporting infrastructure and training in India, Brazil and Uganda. Finally, in delivering our employee objectives, we are focused on improving inclusion and diversity, achieving both the Board gender and ethnic diversity targets of the Hampton-Alexander and Parker Reviews by the start of 2022, whilst making good progress in improving diversity and inclusion within the business.

Supporting our Climate, Land and People Positive strategy are our Fundamental objectives. We are committed to being a safe company for our employees and communities. With the inclusion of recent acquisitions into Group metrics, the Total Recordable Injury Rate ('TRIR') rose to 0.73, excluding COVID-19 cases (2020 full year: 0.58). 83 of our 105 locations had no recordable injuries during 2021 and we are working on the remainder to deliver our targeted improvement to 0.3 by 2025, which would place us towards the leading performance in our industry. During the year we also adopted an enhanced approach to process safety aligned with SASB standards for our industry, targeting a 20% reduction in the incident rate by 2025.

Driving innovation

In line with repositioning as a more knowledge-intensive company, NPP as a percentage of sales increased from 27% in 2020 to 28% in 2021 organically and 37% including lipid systems and the Iberchem and Avanti acquisitions. This significant step forward will support higher growth, improved product mix and better margins. The divestment of the majority of PTIC will further enhance our knowledge intensity.

Our innovation strategy combines internal R&D with external technology investments and partnerships, augmenting Croda's innovation centres globally with a network of over 500 academic and SME partners, working on more than 100 innovation projects. In 2021, we commenced a multi-million pound project to introduce artificial intelligence and data mining across our global R&D knowledge base and improve collaboration within our innovation ecosystem.

Innovation is focused on sustainability and, in particular, biotechnology, which will enhance the sustainability of our processes, contributing to the achievement of our target for bio-based raw materials whilst developing disruptive technologies. Our Beauty Actives business has augmented its product synthesis with 50 biotech product launches. Our biotech expertise also leverages previous technology acquisitions, such as Enza and Nautilus, and 2021 saw investment in a new centre for biotech process design and optimisation in the UK. With innovation operating expenditure up over 50% in 2021, we are expanding the pipeline of new opportunities.

Sector strategies to deliver growth and even stronger profit margins

With the divestment of the majority of PTIC, Croda will be a Purpose-driven company focused on two attractive sectors that will deliver consistent sales growth and even stronger profit margin. Each of the two sectors comprises four businesses, all offering superior sales growth, at least one and a half times GDP. Each can deliver margins above 20% and return on invested capital (ROIC) of at least twice our cost of capital. We will target an expanded organic capital investment programme to access faster growth, supported by selective acquisitions of adjacent technologies.

Consumer Care is already recognised as the leading innovator in ingredients and fragrances for the personal care and home care markets. Our future vision is to be the global leader in sustainable solutions in these premium markets. This will be achieved by delivering sustainable ingredients, supported by performance data and ingredient transparency, and by being the leader in product formulation and application technologies.

Consumer Care is focused on high value niches in the faster growing markets of skin care, hair care, solar protection, fabric and surface care, and fragrances. Our strategy is to Strengthen to Grow Consumer Care, to deliver mid-single digit percentage sales growth at strong margins. This will be delivered by developing more sustainable ingredients; leveraging our capability to deliver formulation solutions; by driving innovation in premium markets, with Croda providing a 'one stop shop' to 'Indie' customers; and by expanding our presence in high growth regions, with increased investment in China, expected to drive 70% of Asian growth between 2021 and 2025.

Within Consumer Care's four businesses, this strategy is being achieved by:

- Scaling our market leadership in Beauty Actives in peptides, botanicals and biotechnology, expanding our geographic footprint and leveraging selective acquisitions;

Amplifying our positive impact by funding the Croda Foundation

This year we have taken a big step towards achieving our ambition of expanding the reach of our smart science to permanently improve more lives by funding the Croda Foundation.

As part of its charitable remit, the independent Foundation issues grants for critical projects to support livelihoods and communities. Initial projects funded by the Foundation are benefitting people in the US facing food insecurity, supporting vulnerable mothers in Kenya, and unemployed, blind and partially sighted people in South Africa, who are being trained as food tasters to enable them to participate in the local economy.

The Foundation also distributed grants specifically focused on health infrastructure projects, improving access to vaccines, and tackling vaccine hesitancy in India, Uganda and Brazil. By funding the Croda Foundation, we are making a bigger impact on communities across the world.

Rommel Moseley, Executive Director Croda Foundation, said: *"The Foundation has been established on Croda's firm commitment to be People Positive by 2030. Our priority areas approved by our trustees are to improve health and wellbeing, reduce hunger and poverty, and protect and restore forest and ecosystems."*

To read more about the Croda Foundation see our 2021 Sustainability Report
P33

- Strengthening Beauty Care, with sustainable effect ingredients and a full service formulation capability, supported by ingredient data to underpin our customers' product claims;
- Unlocking the potential of F&F, by driving the benefits of integration synergies through expanding Croda's presence in emerging markets and providing Iberchem with access to Croda's developed market presence, such as the US and Brazil, while supporting one-stop-shop formulations which combine high performance Croda ingredients with Iberchem's on-trend fragrances and developing more natural fragrances; and
- Accelerating Home Care in sustainable cleaning, fabric care technologies and sensory benefits.

Life Sciences is today well established as a leading supplier of delivery systems to pharmaceutical and crop science customers through high quality ingredients and unique purification and synthesis know-how. Our future vision is to become the global leader in biopharma drug delivery in Health Care, alongside our leadership in sustainable delivery systems for Crop Care. This will be achieved by delivering solutions and systems to customers; leveraging our leadership in synthesis, formulation and application technology know-how; expanding sustainable technology platforms; and increasing our expertise in complex formulation systems.

Our strategy is to Expand to Grow Life Sciences to deliver high single digit percentage sales growth with a strong return on sales. Within the four Life Sciences businesses, this strategy is being achieved by:

- Expanding our platforms in Patient Health. Our established speciality excipient platform provides high purity delivery systems for therapeutic drug applications, such as oncology, and is growing rapidly, providing the excipients of choice for the newest biologic drug innovations. To this we have added two new platforms – vaccine adjuvants in 2018, providing the important accelerator to a range of new global vaccines; and lipid systems in 2020, the preferred solution for the developing science of nucleic acid delivery (e.g. mRNA), which is expected to revolutionise medical delivery in the next decade. Our strategy is to identify and acquire new platforms, and grow them organically with rapid, agile investment;
- Continuing to grow in Consumer and Veterinary Health, through oral care, topical application and animal health solutions;
- Innovating in Crop Protection. We are developing an industry-leading range of low carbon, bio-based and biodegradable delivery systems, alongside systems for next generation biopesticide delivery and crop nutrition, as the world reduces its dependence on chemical solutions; and
- Creating long-term partnerships in Seed Enhancement. This includes providing seed coatings and pellets that are free from micro-plastics and developing technologies to stimulate plant growth.

Deploying capital

Our transition to a pure-play Consumer Care and Life Sciences company will allow us to deploy capital into the rich seam of growth opportunities in these markets, whilst maintaining our discipline of careful capital allocation to projects which generate superior returns on capital. This will allow us to continue to scale our consumer, health and crop care technologies and deliver consistent sales growth and an even stronger profit margin. Our priority is organic capital expenditure to take advantage of the significant growth opportunities available in higher returning life science and consumer markets. This will be supplemented by selective acquisition of disruptive technologies in existing and adjacent markets to accelerate strategic delivery.

We are unlocking the value of £1.2bn of investment in the last two years in acquisitions and capacity expansion. Our preferred approach is to 'buy and build', as exemplified by our investment in Life Sciences since 2015, where we have secured new technology platforms and know-how through modest acquisition spends, such as Incotec seed enhancement, Biosector vaccine adjuvants and Avanti lipid systems, then built scale through organic investment.

In Life Sciences, drug delivery offers a significant growth opportunity, much of which can now be delivered through organic investment, although we will continue to look for additional delivery technologies to complement our three successful platforms. In addition to over £70m invested in 2021, we have committed a similar amount in future capital expenditure to reinforce our leading position in drug and vaccine systems. This investment programme will include expanding our lipid systems capability in the US and UK.

In Consumer Care, our investment focuses on expanding sustainable technologies, such as mild surfactants and innovative proteins for clothes care, to meet developing customer demand. We will also invest in increasing geographic coverage, particularly in fast growth markets, such as Asia. The sector will also benefit from investment in biotechnology and decarbonisation. This will continue to be supplemented by careful acquisition of adjacent technology bolt-ons, particularly those which can accelerate our transition to greater use of natural raw materials, an important differentiator in consumer markets.

Outlook

Growth is expected to continue in 2022 in line with our medium-term expectations. This should be supported by robust consumer demand, inflation cost recovery and the benefit of our recent investments more than offsetting moderation in customer restocking. Lipid systems sales are expected to be at a similar level to 2021. With an increasing proportion of sales coming from higher value add solutions, profit margins in Consumer Care and Life Sciences are expected to remain strong.

The combination of our differentiated business model, healthy innovation pipeline and current investment programme are expected to underpin performance and continue to generate value for all our stakeholders.

Steve Foots
Group Chief Executive

The Strategic Report was approved by the Board on 28 February 2022 and signed on its behalf by Steve Foots.

The megatrends shaping our markets

Of the megatrends which will drive growth across Croda, three common themes are sustainability, emerging markets and digital.

	Industry trends	Opportunity for Croda
Sustainability	• Climate change, biodiversity loss and rising inequality are changing consumer demands, making sustainability as big a driver of consumer choice as performance. • This is reflected in broader and stricter regulations, increasing barriers to entry. • The chemicals industry is acknowledged to be 'hard to decarbonise', with its reliance on petrochemical raw materials and heat-intensive operations.	• Leverage our leadership positions in renewable raw materials and biotechnology, as well as our asset-light operations and investment in sustainability over many decades, to meet changing consumer demands. • Create new market niches through novel and sustainable product offerings. • Win market share by providing sustainable alternatives to ingredients manufactured by incumbent suppliers.
Emerging markets	• Growing consumption and an expanding middle class in emerging markets is increasing demand for consumer goods and health care. • Three quarters of the world's food is also produced by developing countries, with crop land area increasing quickly, putting more pressure on resources. • Market structures are still developing in many of these countries.	• Focus investment on faster growth markets outside of North America and Europe, such as China which is forecast to be the fastest growing consumer market 2021-2025. • Leverage our global footprint and direct selling model to help smaller, regional customers get to market quickly. • Put a particular emphasis on governance, sustainability and business ethics in developing markets.
Digital	• 60% of the world's population is connected to the internet and regularly use social media, disrupting many industries. • Digital is accelerating the speed at which new trends are adopted and lowering the barriers to entry for our customers. • Consumers want to know more about the products they use and the companies they purchase from.	• Leverage our position as a responsible, purpose-driven company by being transparent with the information that we share. • Capitalise on the opportunities digital creates to be a more sustainable, innovative and customer-driven company. • Engage directly with people anywhere, particularly new, digitally enabled customers.

See Our strategy P20

Leveraging expertise in sunscreens for Asian markets

There are over three million cases of skin cancer globally each year, responsible for tens of thousands of deaths. Our range of sunscreens meet a clear need and are an important pillar of our sustainability Commitment to be People Positive by 2030. Our capability is in mineral inorganic sunscreen filters that are the natural choice, certified by regulators, and are coral safe – a key concern with organic sunscreens that currently dominate the market and can be destructive to coral reefs in the oceans.

To meet the needs of consumers in different regions of the world we are adapting our formulations for different skin types, skin tones and consumer preferences. For example, R&D teams across Asia worked collaboratively to optimise our sunscreen ingredients for consumers in the Asian market. Detailed market evaluation identified demand for a sunscreen offering a high level of protection with a translucent-to-transparent finish and no white smearing.

The sensory evaluation and data analysis undertaken provided insights that enabled our R&D teams to develop ingredients that have seen high levels of interest from customers across Asian markets.

Dr. Jasmine Leong, Technology Development Manager, said: *"Croda has its own group of sensory experts who can characterise cosmetics products with precision and reproducibility. Our expertise within sun care has allowed us to understand the sensory behaviour and consumer expectations, thereby helping the formulators in optimising the product."*

Consumer Care response

- We have established Consumer Care as a sustainability-driven sector to meet consumer demands for products that are 'green', 'clean' and 'conscious'.
- We are differentiated by science and sustainability, providing ingredients that are the most effective and the most sustainable.

- We 'think global' and 'act local'.
- We are enhancing our people, technical, and manufacturing capabilities in China and other countries in North Asia.
- We are leveraging Iberchem's network of 3,000 customers, more than 80% of whom are outside Europe and North America.

Life Sciences response

- We are the leading innovator for delivery systems in Life Sciences, providing targeted solutions that help customers meet their sustainability challenges.
- We have added seed enhancement and biostimulants to our crop care capabilities, in recognition that in future, more seeds will be treated before they are sown and fewer chemicals will be applied to growing crops.
- To improve the health and wellbeing of consumers, we are expanding our technology platforms, enabling the effective delivery of vaccines and next-generation therapeutics.

- We are growing our Crop Care business in Latin America, Asia and the Middle East, and expanding our reach to smaller customers beyond the major crop science companies.
- Asia is a priority for our Health Care business with new product registrations in China complemented by strengthened regulatory support to accelerate approvals; Japan, Korea and India are also a focus for investment.

- Our R&D teams are adopting digital knowledge management, enabling enhanced use of data science and faster innovation.
- Our operations teams are adopting AI; for example, our Seed Enhancement business has used AI to improve the quality of high-value tomato seeds.
- Our sales and marketing teams are utilising digital communication tools, such as Live Chat and new websites specifically written for Chinese customers, to connect directly with customers in particular market segments, such as pharmaceutical researchers and independent brands.

Sandra Breene, President Regional Delivery:

Our focus in 2021 has been to listen more closely to the voice of our customer; we developed a comprehensive survey which has been rolled out globally to understand the things that are of most importance to our customers and how we are performing against them.

Sustainability makes strong commercial sense for our customers. As consumers become more educated about the impact of their behaviour on the wider environment, they are looking to make choices in the products that they buy so that they can make a positive contribution to living more sustainably.

Consumer requirements differ country-by-country and whilst emerging markets are recovering more slowly from COVID-19, they are increasingly setting new trends. They offer higher growth rates over the medium term, particularly in Asia where China's personal care market is growing 9% a year. We tailor our offering to those differing needs by listening to our customers wherever they are.

Almost all customers have experienced huge growth in digital sales during the COVID-19 pandemic, accelerating trends we were already seeing in our markets. Digital is a huge disruptor and our digital strategy focuses on R&D and production as well as sales & marketing, helping us bring innovation to market faster and in a more targeted way.

Our business model

Using smart science to create high performance ingredients and technologies that improve lives.

1 Who we rely on

Innovation partners

37%
NPP as a % of total sales
(2020: 27%)

36
new open innovation projects initiated

Our innovation model combines internal R&D with external technology investments and partnerships, providing opportunities to collaborate with universities and SMEs. This innovation ecosystem is unique, with R&D advances increasingly driven by these partnerships. Our partners contribute to the high proportion of NPP we sell and the continued differentiation of our portfolio. In return, our shared knowledge helps them to advance science, secure funding and make breakthroughs that benefit society.

Employees

84%
UK employee share scheme participation
(2020: 85%)

60%
Non-UK employee share scheme participation
(2020: 63%)

8%
Voluntary employee turnover
(2020: 5%)

We have a growing global employee base with more than a quarter of employees now located in Asia serving faster-growth markets. Recent acquisitions have increased the proportion of people in science-based roles. Improving workforce diversity is benefitting innovation by expanding the range of thinking in our company. Our model is decentralised, facilitating faster decision-making delegated to colleagues who are close to customers. Our clear sense of Purpose and sustainability Commitment, underpinned by high levels of employee share ownership, ensures that everyone pulls together to achieve our goals. This is reflected in strong engagement and high employee retention rates.

Suppliers

Suppliers representing
65%
of our spend have been evaluated for their responsible practices
(2020: 50%)

Most of Croda's organic raw materials are bio-based (originating primarily from palm derivatives, corn, castor, rapeseed, coconut and sunflower oils), enabling us to provide alternatives to fossil-based ingredients. Using natural resources brings with it responsibility to ensure there are no negative societal or environmental impacts as well as ensuring security of supply. We partner with suppliers to improve sustainability practices in supply chains and commit to sharing the benefits equitably.

2 What we do

CRODA

We use smart science to create high performance ingredients and technologies that improve lives. Our ingredients deliver vital functionality to customers at low inclusion levels, giving us strong pricing power and allowing us to prioritise profit growth, ahead of sales, ahead of volume. We operate globally and are focused on high-value niches in life science and consumer markets.

Create

Leveraging our position as the leading innovator in our selected markets, we meet consumer needs by continuously expanding our portfolio of 6,000 sustainable and innovative ingredients, supported by claims validation, quality testing, sustainability data and regulatory insight.

Engage

By building direct relationships with customers, rather than using distributors, and collaborating with them at Croda innovation centres around the world, we gain a detailed understanding of their needs helping us to identify new opportunities.

Make

We use resources safely and responsibly at our manufacturing sites around the globe, running flexible operations that have a lower capital intensity than most chemical sector peers.

Sell

We have a unique direct selling model encompassing local sales, technical resource and warehousing, selling ingredients to around 17,000 customers ranging from multinational companies to regional and independent brands.

Priority SDGs

2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
5 GENDER EQUALITY
7 AFFORDABLE AND CLEAN ENERGY
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
15 LIFE ON LAND

Why we are different

- Strong sense of Purpose
- Agile, decentralised operating model; 'One Croda' culture
- High proportion of renewable raw materials
- Long-standing leadership and investment in sustainability
- Long-term sustainability strategy in place
- Global footprint with local sales, R&D and warehousing
- Collaborative, open innovation model
- Flexible, capital-light operations
- Direct-to-customer selling model rather than using distributors
- Broad customer base, large and small
- Compete on value rather than price
- Focused on high-value niches
- Top returning FTSE 350 company over the last 20 years

3

Who we create value for

See Stakeholder engagement
P18

Employees

We have 6,135 (2020: 5,684) employees globally, all of whom received a Living Wage in 2021. We increased the proportion of women in leadership roles to 36% in 2021, in line with our commitment to achieving full gender balance in leadership positions.

Communities

Our employees donated 2,750 hours (2020: 2,559 hours) via our 1% Club, volunteering in their local communities and delivering tailored support in response to COVID-19. We are providing access to our smart science through the Croda Foundation which achieved charitable status and began funding programmes to improve more lives.

Society

We use our smart science to improve the lives of people all around the world (see People Positive below). In every country in which we operate we pay all required taxes and have a fair taxation policy.

5 GENDER EQUALITY

17 PARTNERSHIPS FOR THE GOALS

Customers

Customer demand

Our customers seek innovative and sustainable ingredients to differentiate their products and meet changing consumer requirements.

~6,000
speciality ingredients

~17,000
customers worldwide

Customer product

Customers use our ingredients at low inclusion levels in their products to deliver vital functionality, while helping to meet their sustainability commitments, regulatory requirements, and consumer needs.

Consumers

Consumer requirements

Climate change, biodiversity loss, widening inequality, changing demographics, and innovations in digital technologies are transforming consumer demands. See our Market themes on page 14.

+100%
increase in sustainable products launches since 2019

Consumer benefit

Through our customers' products, our ingredients improve consumers' lives by addressing their needs in sustainable ways.

Shareholders

Croda is the top-returning FTSE 350 company over the last 20 years. We delivered a record financial performance in 2021 and made significant progress on our non-financial performance as we execute our sustainability strategy.

24%
effective annual return over 20 years

Delivering our Commitment

Climate Positive

We are reducing our emissions in line with our verified Science Based Target, aligned with limiting global warming to the 1.5°C scenario. The majority of our raw materials are renewable rather than petrochemical-based, delivering product carbon footprint reductions to our customers.

7 AFFORDABLE AND CLEAN ENERGY · 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE · 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 13 CLIMATE ACTION

Land Positive

We are already land net zero with our crop and seed technologies saving more land than is used to grow our bio-based raw materials.

2 ZERO HUNGER · 15 LIFE ON LAND

People Positive

Our ingredients improve health and wellbeing, for example in 2021 protecting 55 million people from skin cancer, and contributing to vaccine development projects targeting 15 of the WHO's 24 priority diseases.

3 GOOD HEALTH AND WELL-BEING

Our stakeholder ecosystem

We continue to benefit from working closely with our stakeholders. The strength of our relationships helps drive our success and our positive impact on the world around us.

Section 172(1) statement

The Board of Directors confirms that during the year under review, it has acted to promote the long-term success of the Company for the benefit of shareholders, whilst having due regard to the matters set out in section 172(1)(a) to (f) of the Companies Act 2006, being: a. the likely consequences of any decision in the long-term; b. the interests of the Company's employees; c. the need to foster the Company's business relationships with suppliers, customers and others; d. the impact of the Company's operations on the community and the environment; e. the desirability of the Company maintaining a reputation for high standards of business conduct; and f. the need to act fairly between members of the Company. The information on pages 16 to 19 in the Strategic report should be read in conjunction with the information provided in the Corporate governance report on pages 68 to 71. The content on these pages constitutes our s.172 statement, as required under the Companies (Miscellaneous Reporting) Regulations 2018.

See how the Board engage with our stakeholders
P68

Engaging with our stakeholders

Our people

We employ over 6,000 people across 105 locations in 39 countries around the world. We engage with them through pulse surveys and listening groups as well as regular team meetings. In 2021 we implemented an eight-point plan to support the wellbeing of our employees. With the strategic review of our industrial businesses also underway, a key priority has been communicating openly with our employees, recognising that the engagement and wellbeing of all employees is a cornerstone of our success.

Wellbeing activities

>100

wellbeing activities were held in 2021

See Delivering value through our culture
P36

Our innovation partners

We engage with universities, SMEs, research institutes and our customers through our work with them on R&D projects. We added another 48 partners to our open innovation network in 2021 and ran more than 100 active projects during the year. Our R&D advances are increasingly driven by innovation partnerships and a growing focus of these partnerships is biotechnology, with access to external facilities and specialist expertise complementing continued investment internally.

Innovation partners

579

partners complement internal R&D investments

See Identifying unmet needs
P4

Our suppliers

Suppliers play a critical role in ensuring we can deliver innovative ingredients to customers. With the appointment of a Head of Sustainable Sourcing we are engaging with suppliers so they understand our expectations and align their practices with our values and standards. We have also partnered with EcoVadis as our framework for sustainability monitoring. As most of our carbon emissions are associated with our supply chain, we conducted lifecycle assessments for more than three quarters of our raw materials, significantly enhancing our understanding of our scope 3 carbon emissions.

Suppliers representing

65%

of spend have been assessed by EcoVadis for responsible practices

Read more on our supplier partnerships in our 2021 Sustainability Report
P41

Our customers

With customers ranging from large multi-nationals to regional and independent brands, we engage with them via our direct selling model and at local innovation centres around the world. In 2021 we enhanced this engagement with personalised digital communications, and listened more closely to the voice of the customer through a comprehensive global survey. This engagement develops unique customer intimacy and enables us to gain significant insight into customer challenges, helping to drive our innovation pipeline.

Voice of the customer programme

3,000

customer responses across 49 countries

See 'Customer insights' case study in our 2021 Sustainability Report
P39

Investor engagement on sustainability

Over 8% of Croda's shares are owned by specialist ESG investors compared with an average of 2% for the chemicals sector, reflecting our leadership position on sustainability.

We are pleased that the growth in ESG investors has been accompanied by increased two-way engagement with shareholders as they look to understand broader non-financial aspects of our business.

In November, the Executive Committee supported by our Plc Board undertook a detailed annual review of our sustainability strategy. The review was also supported by Legal & General Investment Management (LGIM) who actively participated in the event.

LGIM provided an overview of their investment process which includes an assessment of companies based on their purpose and impact using the UN SDGs as the framework, so is well aligned with Croda's approach. They outlined their requirements from companies and specific strengths and areas of improvement for Croda.

Matthew Courtnell (pictured right) of Legal & General Investment Management, said: *"As investors we are keen to support and encourage companies on the ESG journey and are always open to engagement on all areas of the business."*

Regulators and trade associations

We engage and share expertise with regulators and trade associations, contributing best practice, helping set minimum industry standards, and ensuring our own compliance. During 2021 we participated in COP26 and contributed to due diligence for impending legislation. We also joined Together for Sustainability, a chemical industry collaboration, through which we are working to set industry-wide standards for data sharing to promote supply chain transparency.

Number of members of Together for Sustainability

33

members working together to promote supply chain transparency

See Driving growth through an embedded strategy
P34

Non-governmental organisations (NGOs)

NGOs perform a valuable function, engaging with businesses to encourage them to take responsibility for their impacts and guiding effective disclosure. We value the insight we gain from our engagement with NGOs which helps us maximise our positive impact and drive the industry towards more sustainable practices. During 2021 we supported a resolution proposed by WWF and other members of Action for Sustainable Derivatives to enhance the robustness of the sustainable palm oil supply chain that was successfully endorsed by RSPO, the global standards body.

Manufacturing sites processing

99%

of our palm oil derivatives are RSPO supply chain certified

See Strategy in action
P32

Our communities

Engaging with our local communities to maintain positive relationships and acting responsibly, safely and sustainably are critical to our success. Our employees are active members of their communities. During 2021, our communities benefitted from our long-standing volunteering programme, educational outreach and tailored support in response to COVID-19. In addition, the Croda Foundation received Charity Commission approval enabling it to commence supporting projects aligned with the UN SDGs.

Croda Foundation

6

initial projects supported through £3m of funding

Read more on our community engagement in our 2021 Sustainability Report
P33

Our shareholders

We maintain open dialogue with shareholders as the owners of our Company and main source of long-term funding. Digital communication is facilitating more regular investor engagement with meetings conducted with over 500 investors in 2021. We are also engaging with shareholders on a broader range of non-financial topics. In 2021 we hosted a virtual event to launch our Sustainability Report, helping investors understand our non-financial performance.

Number of investors met in 2021

>500

across virtual and physical meetings

See Investor engagement
P71

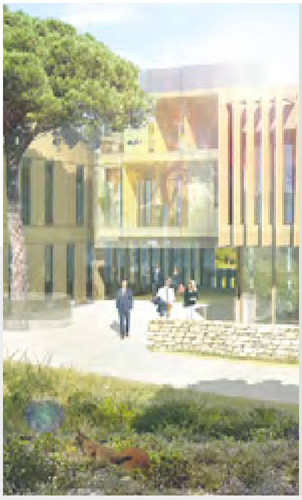
Sustainability + Innovation = Growth

Over the last 18 months we have accelerated key elements of our strategy to progress our transition to a dedicated Consumer Care and Life Sciences company. Across these markets, sustainability together with innovation will drive our future growth. We are focused on implementation, working in partnership with our customers and suppliers, to deliver on our Purpose of using Smart science to improve lives™.

Smart science to improve lives™

Our Purpose guides the strategic choices we make

Group strategic objective	KPIs See Key Performance Indicators P44	Risks See Risk management P53-55
Sustainability **Aligning our business with our Purpose and accelerating our customers' transition to sustainable ingredients.**	• Total Recordable Injury Rate • Absolute scope 1 and 2 emissions and intensity • Land area saved • Health and wellbeing • Climate, Land and People Positive KPIs are used for executive remuneration (see page 88)	• Delivering sustainable solutions • Product quality • Loss of significant manufacturing site • Ethics and compliance
Innovation **The lifeblood of our business, we seek to increase the proportion of NPP (New and Protected Products) that we sell.**	• NPP as % of Group sales • An NPP metric is used for executive remuneration (see page 88)	• Product and technology innovation and protection • Digital technology innovation • Our people — culture, wellbeing, talent development and retention
Growth **Consistent top and bottom-line growth, with profit growing ahead of sales, ahead of volume.**	• Sales growth (%) • Return on sales (%) • Adjusted basic earnings per share (EPS) • Operating profit, earnings per share growth as well as relative Total Shareholder Return are metrics used for executive remuneration (see page 88)	• Revenue generation • Management of business change • Our people — culture, wellbeing, talent development and retention



Investing in natural fragrances

In June 2021 we built on the foundation that Iberchem has provided in the fragrances and flavours market with the acquisition of Parfex, a fine fragrance business based in Grasse in the South of France. Grasse has been the centre of the world's perfume industry since the 18th century. It is blessed with abundant natural fragrance sources, producing two thirds of the natural raw materials used by the French perfume industry.

Parfex employs a dedicated team of perfumers working on natural fragrances and has recently launched a new renewable range. We are creating a new R&D facility which will become the creation centre for natural, sustainable, biodegradable and fine fragrances within Croda.

The new R&D centre will provide more than 2,000 square metres of laboratory and office space. Sustainability and the customer experience were at the heart of the design of the new centre. The centre incorporates a 'green' roof with fragrance vegetation and the space has been designed to enable collaboration with our customers, perfumers and R&D specialists. This investment in natural fragrances for premium personal care and fine perfumery is a potential differentiator in the fragrance markets.

Alexandre Levet, Sales Director at Parfex, said: *"The launch of our new renewable range of fragrances has been well received by customers and the new, cutting-edge R&D facility will spur the creation of new natural fragrances and sustainable products."*

2021 progress and ongoing priorities

Croda

See Chief Executive's review
P10

We are committed to being the world's most sustainable supplier of innovative ingredients.

- 1.5°C Science Based Target verified
- Implementing decarbonisation roadmaps for our sites; quantified capex required
- Completed periodic reassessment of our material issues and climate related risks and opportunities
- Croda Foundation established to permanently improve more lives

- Enhancing our own innovation centres and network of open innovation partners
- Established new centre for biotechnology process design and optimisation
- Investing in digital across all areas of our business model including AI and data mining for knowledge management

- Agreed divestment of the majority of our industrials business
- Increasing our sales, innovation and select manufacturing capabilities in North Asia

2022 strategic priorities

- Further proactive M&A
- Deliver fast growth in China
- Scale biotechnology
- Do the basics brilliantly

Consumer Care

See Sector review: Consumer Care
P24

We are Strengthening to Grow Consumer Care to deliver mid-single digit percentage sales growth at strong margins.

- Established Consumer Care as a new sustainability solutions provider in premium markets
- Acquired Alban Muller to accelerate our transition to more natural raw materials
- Selling our ECO range of bio-based products to replace petrochemical-based surfactants in Home and Personal Care products

- Embracing biotechnology, as well as chemistry, to develop more sustainable ingredients
- Strengthened our Plant Cell Culture capability in Beauty Actives
- Becoming more knowledge-intensive; 44% NPP as % total sales (2020: 38%)

- Built our presence in the fragrances and flavours market following the Iberchem acquisition in 2020; synergy and integration plans on track
- Acquired Parfex, leader in fine and natural fragrances
- Expanded our French-based botanical ingredients in China

2022 strategic priorities

- Expand full formulation service in premium markets
- Invest to build on strong sales in China
- Deliver planned Iberchem revenue synergies
- Grow sales of ECO to personal and home care customers

Life Sciences

See Sector review: Life Sciences
P26

We are Expanding to Grow Life Sciences to deliver high single digit percentage sales growth with a return on sales similar to current levels.

- Meeting the sustainability challenges of Crop Care customers with low carbon, bio-based and biodegradable delivery systems
- More than doubled number of World Health Organisation (WHO) vaccine projects we are working on, to support vaccines for 15 of the WHO's 24 priority diseases

- Developing next generation sustainable crop care delivery systems based on biologics
- Working on over 150 COVID-19 applications
- Secured 130 new customers and 250 new programmes, two thirds for non-COVID applications
- Becoming more knowledge-intensive; 48% NPP as % total sales (2020: 27%)

- Realised significant benefits from Avanti acquisition
- Building a drug delivery business of global scale to unlock future opportunities in mRNA and gene therapy applications
- Doubled capacity in three key patient health care technologies

2022 strategic priorities

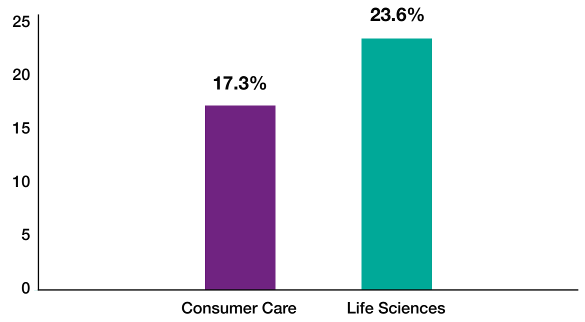
- Expand range of applications for patient health technologies
- Continue to scale-up operations
- Invest in resource in higher growth regions
- Accelerate development of biopesticide delivery systems

A unique proposition with exciting growth potential

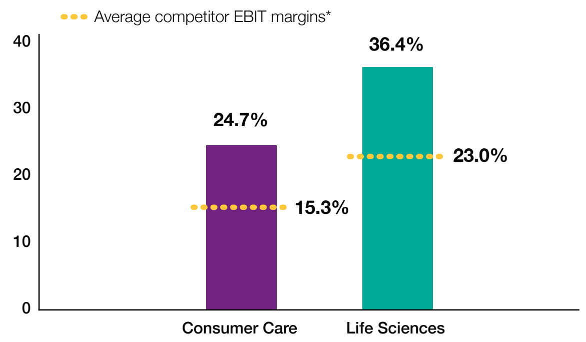
1. Focused on high growth niches

- Progressing our transition to a pure-play Consumer Care and Life Sciences company
- Improved organic sales growth
- Sector leading margins

Underlying sales growth versus 2019 (excluding lipid systems) (%)



Sector-leading return on sales (%)



See Chief Executive's review P10

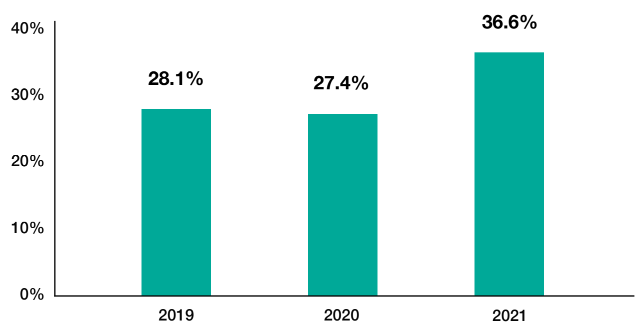
Consumer Care sector peers are Chr. Hansen, DSM, Givaudan, IFF and Symrise. Life Sciences sector peers are Kerry, Lonza, Novozymes, WestPharma and Zoetis.

* Average competitor EBIT margins are adjusted operating profit (before interest and tax) divided by sales, as reported by the company. Numbers are based on full year 2021 reported results.

2. A highly differentiated approach

- Unrivalled customer intimacy through direct-to-customer selling model
- Dynamic innovation engine with increasing sales from New and Protected Products
- A sustainability leader enabling customers to meet consumer and regulatory requirements

Increasing proportion of sales from NPP



Recognised for sustainability leadership

See Business model P16

Jez Maiden, Group Finance Director:

Croda is a unique business. Our Purpose-led culture, direct selling model, sustainability leadership and collaborative approach to innovation all differentiate us from our peers. This has helped drive excellent returns with Croda delivering top quartile shareholder returns over 5, 10 and 20-year time horizons. The agreement to sell the majority of our industrials businesses progresses our transition to a pure-play Consumer Care and Life Sciences company with leading positions in high growth niches. In line with our capital allocation policy, we will focus our resources on delivering sustainable solutions and scaling our consumer, crop and health care technologies. This will lead to consistent sales growth at even stronger profit margins, and higher returns for our shareholders.

3. Compelling financial characteristics

- Strong balance sheet
- Capital light and highly cash generative operations
- Clear capital allocation policy prioritising investment in sustainability and innovation for growth

1
Reinvest for organic growth – 1.5x depreciation

2
Provide regular returns to shareholders – 40-50% of adjusted EPS

3
Acquire complementary and adjacent technologies

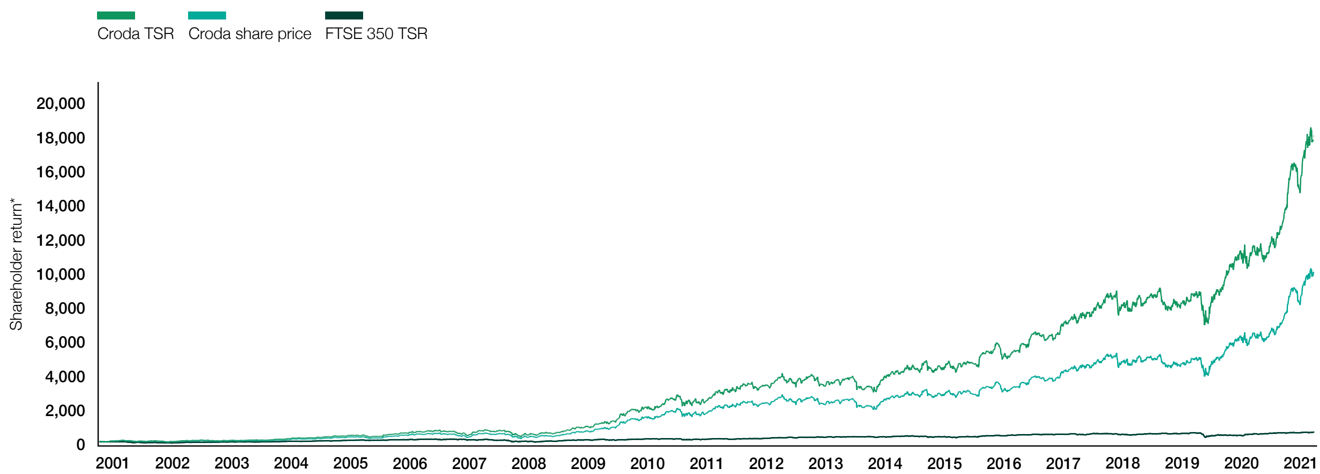
4
Maintain appropriate balance sheet / return excess capital – 1-2x leverage target

See Finance review
P46

4. Delivering consistent shareholder returns

- High returns on capital – 2-3x cost of capital
- 30-year track record of dividend progression
- Top quartile TSR performance over 5, 10 and 20-year time horizons

Top returning FTSE 350 company 2001-2021 (Total Shareholder Return)



Note: Chart covers 31 December 2001 to 31 December 2021.

* Rebased to Croda's initial share price of 241p at 31 December 2001.

Consumer Care

Market sectors

Beauty Actives	Beauty Care	F&F	Home Care

Building a stronger Consumer Care

David Shannon
President Consumer Care

2021 was a year of significant growth, even compared with pre-pandemic trading, particularly at the premium end of the market which will continue to grow as a proportion of our sales.

This year we've added higher growth businesses to the Consumer Care portfolio. The Home Care business has an impressive growth profile based on sustainable technology platforms. Iberchem, our Fragrances and Flavours (F&F) business acquired in November 2020, also has an admirable track record of growth augmented by revenue synergies made possible by our ownership.

Within F&F and across Croda we are well placed to meet the requirements of regional and independent customers, due to a broad portfolio and formulation expertise that accelerates customers' speed to market. We are leveraging this business model by providing total solutions tailored to local needs.

We are also leveraging our leadership position in sustainability, built on our heritage of using renewable raw materials and significant investment over more than a decade. This sustainability leadership is now bringing clear commercial benefits.

In addition, our ingredients deliver proven efficacy underpinned by science and innovation. We will deliver higher and more consistent growth as the leading sustainable and science-driven solution provider in consumer care markets.

See Our strategy
P20

Sector strategy

Strengthening to Grow Consumer Care

Sustainability

- Established Consumer Care as a new sustainability solutions provider in premium markets
- Acquired Alban Muller to accelerate our transition to more natural raw materials
- Selling our ECO range of bio-based products to replace petrochemical-based surfactants in Home and Personal Care products

Innovation

- Embracing biotechnology, as well as chemistry, to develop more sustainable ingredients
- Strengthened our Plant Cell Culture capability in Beauty Actives
- Becoming more knowledge-intensive; 44% NPP as % total sales (2020: 38%)

Growth

- Built our presence in the fragrances and flavours market following the Iberchem acquisition in 2020; synergy and integration plans on track
- Acquired Parfex, leader in fine and natural fragrances
- Expanded our French-based botanical ingredients in China

Sales
£763.0m
(2020: £527.8m)

Adjusted operating profit
£188.5m
(2020: £146.5m)

Consumer Care comprises Croda's leading global position in Personal Care, F&F and Home Care. After a challenging period for the top-line in 2019 and a COVID-impacted 2020, the Personal Care business returned to good sales growth in 2021, delivered with a strong margin. This was led by our innovative, high value Beauty Actives business, supported by a resurgence in consumer demand in the heritage Beauty Care division, with total Personal Care underlying sales 15% above 2019's pre-pandemic level and return on sales of 30%. Alongside Personal Care, the Home Care business saw excellent demand for its innovative fabric care ingredients. Iberchem has proven to be an excellent acquisition, with innovation at the heart of its business, offering customers in personal and household care applications on-trend fragrances, particularly for emerging markets.

Consumer Care delivered an excellent sales performance, up 45% in reported terms to £763.0m (2020: £527.8m). Underlying sales were 18% higher, supplemented by 35% growth from acquisitions and partly offset by adverse currency translation of 8%. Within underlying growth, price/mix was 13% higher, reflecting growth in higher value products and recovery of raw material price increases, with volume 5% higher.

IFRS operating profit increased by 26% to £168.0m (2020: £133.0m). Adjusted operating profit increased by 29% to £188.5m (2020: £146.5m). Return on sales declined to 24.7% (2020: 27.8%), reflecting the dilution impact from F&F, which operates at structurally lower margins than Personal Care.

Doubling the lifetime of clothes

The garment industry is responsible for 3% of global carbon emissions. What's more, over half the clothes we wear end up in landfill. Extending fabric life can therefore deliver significant benefits for the planet.

Croda has developed a range of fabric care proteins that replace silicones and double the lifetime of clothes. Our ingredients protect individual fibres helping our customers meet consumer demand for renewable ingredients, sensory benefits and 'care for clothes'.

These proteins were critical to Unilever's relaunch of their Comfort fabric conditioner. We are backing this technology with £30m of investment and expect sales of tens of millions pounds a year.

Most importantly, our fabric care technology is reducing the impact of this industry on the environment through lower carbon emissions, reduced water use and a significant reduction in clothes disposed in landfill.

Yong Chuan Lew (pictured), Global Business Director for Home Care at Croda, said: *"Croda continues to lead sustainable innovation through our novel protein technology, delivering unique solutions to help our clients to achieve their sustainability goals and meet consumer demands. At the same time we are making a positive contribution to the environment, demonstrating our Purpose of using Smart science to improve lives™."*

2021 business performance

After recovering in the second half of 2020 from the impacts of the first COVID-19 global lockdown, demand from Personal Care customers strengthened during the first half year, particularly in luxury and premium markets. This was driven by resurgent consumer demand, which continued through the balance of the year. Customers also increased their short-term stockholding. This growth benefitted our Beauty Actives business, the leading innovator in the global skin care market. Beauty Care also saw good growth in its ingredients for sun care, cosmetics and hair care markets, alongside continued demand for 'at home' use products. Innovation is focused on natural ingredients and biotechnology to meet growing consumer demand, with Beauty Actives launching Ameyezing™, a biodegradable product with its origins in wild ginger that improves the appearance of dark eye circles. Beauty Care and Home Care leveraged sustainability through the bio-based ECO surfactants plant in the US, which enables delivery of sustainable ingredients that deliver identical performance to petrochemical peers.

Iberchem and Parfex have proven to be excellent acquisitions. The integration of Iberchem, which has more than 80% of sales in emerging markets, is on track to deliver nearly €50m of annualised revenue synergies by 2025, principally through leveraging the combined global sales network. Integration has focused on realising these revenue synergies and helping to transition raw materials onto a more sustainable basis. Ten target countries have been identified for revenue synergies, including the United States and countries in Asia, leveraging Croda's sales team presence. In Brazil, a new Iberchem business and R&D laboratory have been established at the Croda site. Iberchem has launched new product lines that are Ecocert-accredited as environmentally friendly and socially conscious, as well as biodegradable. Overall F&F sales grew double digit percentage, despite the impacts of COVID being more pronounced in emerging markets, with their lower vaccination protection rates.

Strengthen to grow in Consumer Care

Consumer Care is focused on high value niches in faster growing markets, where sustainability and innovation are key differentiators. NPP as a percentage of sales grew to 44% (2020: 38%). Our strategy is to Strengthen to Grow Consumer Care to deliver mid-single digit percentage growth (before raw material cost recovery) at strong margins. We are achieving this by embracing biotechnology, in addition to chemistry, to develop more sustainable ingredients, by leveraging our world class reputation for formulation expertise to become a full solution provider in premium markets, and by expanding our presence in key technology adjacencies and in high growth regions, particularly Asia.

Organic investment in Consumer Care is focused on expanding sustainable technologies, such as mild surfactants and innovative proteins for clothes care, to meet accelerating customer demand. The sector is benefitting from investment in biotechnology and decarbonisation, both of which help reduce 'scope 3' carbon emissions in our customers' supply chains. We supplemented organic investment with the acquisition of two businesses which accelerate our transition to more natural raw materials, an important differentiator in consumer markets. In March, we acquired natural actives specialist Alban Muller for €25m, expanding our portfolio of natural ingredients in our global leading Beauty Actives business. In June, we completed the acquisition of Parfex for €45m. This acquisition increases Iberchem's sustainable fragrance offerings and reinforces Iberchem's superior growth profile with greater access to fine fragrances.

The four Consumer Care businesses each have a clear growth strategy. Beauty Actives is the leader in premium skin active markets, developing critical ingredients based on its expertise in peptides, botanicals and biotechnology. We have introduced our successful French botanical ingredients to China, where consumers have a long-standing preference for plant-based beauty products. We will continue to invest in China, building on excellent sales in 2021, enabled by investment in sales, innovation and leveraging tighter regulation of active ingredient claims.

Growth in Beauty Care is being driven by sustainability, with technologies such as vegan-friendly hair care ingredients and bio-based surfactants displacing petrochemical alternatives from competitors. We are developing the highly differentiated parts of the portfolio, such as our inorganic UV filters for sun protection. We have invested in additional capacity to deliver sulfate-free surfactants to meet consumer demand for 'clean beauty' products.

In F&F, we are targeting to continue delivering faster growth from emerging market exposure, supplemented by significant integration synergies and servicing the needs of smaller customers with a one-stop-shop approach, combining Croda's critical ingredients with Iberchem's on-trend fragrances. We will continue to invest in Fragrances, with a new creation centre for fine perfumery and natural fragrances at Parfex in France, by using bio-based solvents in production processes and through an R&D programme to develop next generation fragrances through biotechnology.

We are unlocking the growth potential of our Home Care business in fabric care and hygiene applications, with technologies that are highly differentiated by their sustainability credentials. The business delivered a 50% increase in sales of ECO surfactants to Home Care customers. We also commissioned additional capacity to deliver Coltide Radiance to a multinational customer for the relaunch of its fabric conditioner brand, together with protein technologies to other customers to extend the life of clothes.

Life Sciences

Rapid expansion in Life Sciences

Daniele Piergentili
President Life Sciences

The Life Sciences team had a successful year, in which we have truly lived Croda's Purpose to use Smart science to improve lives™ and, at the same time, captured value in the fast-growing markets we supported.

In Health Care, we have strengthened our capabilities in drug delivery technologies. Our role in the fast development and supply of lipid systems for the mRNA vaccines is an example of our innovation and flexibility in action. We also stepped up our research into novel vaccine adjuvants, and continue to work closely with our partners to target next generation vaccines, many for target diseases which do not have effective immunisation programmes today.

In Crop Care, the majority of our investment has been focused on building technology platforms with an improved biodegradability and carbon footprint – a clear commitment to our partners' sustainability roadmaps. An example is our microplastic-free range of seed coatings which have seen uptake across both field crop and vegetable applications this year.

The move we are making in Health Care from ingredients for consumer applications to delivery systems for biologics, and the commitment in Crop Care to develop delivery systems with a drastically improved sustainability profile are at the core of our desire to be 'future ready'.

See Our strategy
P20

Sector strategy

Expand to Grow Life Sciences

Sustainability
- Meeting the sustainability challenges of Crop Care customers with low carbon, bio-based and biodegradable delivery systems
- More than doubled number of World Health Organisation (WHO) vaccine projects we are working on, to support vaccines for 15 of the WHO's 24 priority diseases

Innovation
- Developing next generation sustainable crop care delivery systems based on biologics
- Working on over 150 COVID-19 applications
- Secured 130 new customers and 250 new programmes, two thirds for non-COVID applications
- Becoming more knowledge-intensive; 48% NPP as % total sales (2020: 27%)

Growth
- Realised significant benefits from Avanti acquisition
- Building a drug delivery business of global scale to unlock future opportunities in mRNA and gene therapy applications
- Doubled capacity in three key patient health care technologies

Sales
£572.3m
(2020: £392.5m)

Adjusted operating profit
£208.5m
(2020: £124.5m)

Life Sciences delivered significant sales, profit and margin growth in 2021. It is leveraging in-house developed and acquired technologies, building scale for the delivery of customers' drug, vaccine and crop science products. It is moving into faster growth, higher value/lower volume niches. The highest growth in 2021 was seen in Health Care, with reported sales up 80% year-on-year, driven by our focus on patient health platforms. Crop Protection delivered double digit percentage growth, reflecting strong demand from crop science customers. By contrast, the overall performance of Seed Enhancement was subdued.

Sales grew 46% in reported terms to £572.3m (2020: £392.5m). Underlying sales were over 40% higher, supplemented by over 13% growth from acquisition and partly offset by adverse currency translation of 8%. Within underlying growth, price/mix was 35% higher, reflecting growth in higher value products, with volume 5% higher.

IFRS operating profit increased by 79% to £201.0m (2020: £112.3m). Adjusted operating profit increased by 67% to £208.5m (2020: £124.5m). Return on sales increased to 36.4% (2020: 31.7%). As noted at the half year, achieving this level of growth and profit improvement in such a short period has placed significant demands on the business and, as anticipated, the margin level moderated in the second half of the year as we invested in additional people and brought new capacity on stream to future-proof this growth, in addition to a mix impact from increased Crop Protection sales in the period.

2021 business performance

Health Care benefitted from the first full year of ownership of Avanti. This has exceeded expectations since its acquisition in August 2020 with its sales more than doubling over its full year 2020 performance. It has grown sales for clinical research delivery systems with its pharmaceutical R&D customer base. In addition, its in-house production of lipid systems components for COVID-19 vaccine applications has been supported by sales from Croda's UK lipid facility, which worked with Avanti in 2020 to support the world's first COVID vaccines. Croda's total lipid systems sales in 2021 were approximately US$200m, primarily to our principal vaccine customers, accompanied by a rapidly building future sales pipeline of other nucleic acid applications.

Health Care's established patient health care platforms in speciality excipients and vaccine adjuvants also enjoyed strong growth in 2021, with underlying sales up over 40%. Alongside COVID-driven demand for therapeutic drugs and vaccines, this reflected strong demand for speciality excipients in biologic drugs, and for adjuvants for new vaccines and global expansion of existing protection, particularly in the developing world.

Within Crop Care, Crop Protection delivered robust sales growth as a result of strong demand, inflation recovery and continued diversification of its customer base. Seed Enhancement delivered a good performance in Latin America driven by continued good sales growth for field crops, but demand was constrained for vegetables.

Expand to grow in Life Sciences

We have established Life Sciences as a high value solution provider to pharmaceutical and crop customers. Our strategy is to Expand to Grow Life Sciences to deliver high single digit percentage organic sales growth with a return on sales well above 30%. We are deploying more capital into Life Sciences to develop sustainable solutions in our crop care businesses and to build a broad-based drug delivery business of global scale. We are also strengthening innovation, through technology acquisition and organic development. In 2021, NPP as a percentage of Life Sciences sales was 48% (2020: 27%), driven by the Avanti acquisition and the growing proportion of sales from higher value add technologies.

Within Life Sciences, the four businesses – Patient Health, Consumer and Veterinary Health, Crop Protection, and Seed Enhancement – each have a clear growth strategy. Patient Health offers the most significant global opportunity for growth, much of which can be delivered through organic investment. We are leveraging our unique purification and synthesis know-how by investing in people resource, R&D and operational scale up to become a leader in biopharma drug delivery across nucleic acids, proteins and vaccine adjuvancy. This builds on our significant progress to date, including meaningful sales of novel technologies, such as non-aluminium vaccine adjuvants and lipids for non-COVID-19 nucleic acid applications.

In 2021, we invested over £70m to scale up manufacturing capacity for our three patient health care platforms, reinforcing our leading positions in drug and vaccine delivery systems. Through recent investment, we have doubled our capacity for vaccine adjuvants at our GMP facility in Denmark, for speciality excipients at our US site and for lipid systems capacity in the Avanti, US and Croda, UK facilities. In addition, we have committed a similar amount in further investment in these platforms. Whilst we are currently serving strong demand for emergency COVID-19 applications, this new capacity will increasingly unlock future opportunities in new mRNA and gene editing applications.

Across our three patient health technologies, we secured 130 new customers and 250 new programmes, two thirds of which were for non-COVID applications. We started working on 90 new COVID-19 projects, bringing the total to more than 150 in over 30 countries. 160 new non-COVID programmes included delivery of speciality excipients for oncology and immunosuppressant applications, support to the development of HIV and Ebola vaccines prioritised by the World Health Organisation, and the development of lipid systems for new mRNA vaccines such as influenza. We expect to see an ongoing expansion in the range of lipid systems for vaccines and therapeutic drugs, moving to a broader portfolio of customers and applications in the medium term.

In Consumer and Veterinary Health, we are continuing to grow in oral care, topical application and animal health solutions.

Our Crop Protection business is expanding its leading position in formulation ingredients to provide sustainable delivery systems for our crop customers. It is established as a key innovation partner to the major crop science companies and is increasing sales to medium-sized and smaller customers who now account for more than 50% of revenue. Crop Protection already provides low carbon, bio-based and biodegradable delivery systems, and is developing systems for next generation biopesticides and biostimulants that use microbials and RNA. Similarly, sustainability trends are driving Seed Enhancement, where we have secured our first commercial customers for seed coatings that are free from micro-plastics. It is also developing seed enhancement technologies that stimulate plant growth.

Supporting WHO priority vaccine development around the world

As part of our People Positive strategy, we are committed to using our smart science to promote healthy lives. By the end of 2024, we want our technology to be part of 10 phase three clinical trials across at least a quarter of the priority pipeline vaccines listed by the World Health Organisation.

We are currently working on more than 150 COVID-19 projects in over 30 countries, the majority of which utilise our vaccine adjuvant technologies acquired with Biosector in 2018, as well as our expertise in speciality excipients and lipid systems. We worked with countries around the world to support their vaccination programmes as vaccine development and production globalised. For example, our team in Indonesia worked with authorities to fast-track import of Croda ingredients as well as providing technical support to produce vaccines locally in response to escalating cases.

Laura Ciccardi, Sales Manager in Health Care at Croda, said: *"We are incredibly proud to be supporting the development of sovereign vaccine programmes around the world, helping to improve the supply and accessibility of COVID-19 treatments in both developed and developing nations."*

Looking beyond COVID-19 we are investing in next generation adjuvant technologies to become more involved with the fight against 24 other WHO-listed diseases such as malaria, HIV and tuberculosis. We are also increasing the collaboration across our patient health portfolio, recognising the benefits of Avanti and Biosector working together.

Performance Technologies

Market sectors

Smart Materials | Energy Technologies

Performance Technologies continued to strengthen during 2021 against a backdrop of rapid recovery in industrial and technology markets.

Performance Technologies continued to strengthen throughout 2021. Sales growth reflected increased demand across automotive, packaging and industrial end markets. Margin also improved through improved product mix and the benefit of increased volume on operating leverage within the sector. Smart Materials delivered strong sales across its broad range of application markets, including markets which benefitted during COVID lockdowns, such as packaging. 2021 also saw a rapid recovery in Energy Technologies markets. Significant raw material cost inflation was fully recovered through selling prices.

Sales grew by 18% in reported terms to £439.5m (2020: £373.6m). Underlying sales were 24% higher, partly offset by adverse currency translation of 6%. Within underlying growth, price/mix was 11% higher, reflecting recovery of raw material cost increases and greater contribution from higher value products, with volume 13% higher as sales recovered post-pandemic.

IFRS operating profit increased by 38% to £62.7m (2020: £45.3m). Adjusted operating profit increased by 32% to £64.5m (2020: £48.9m). Return on sales increased to 14.7% (2020: 13.1%). Second half margin performance was notably stronger than prior year, reflecting the benefit of operating leverage and growth in higher value-add niche markets.

Against the backdrop of a rapid recovery in industrial and technology markets, as well as rising raw material costs, demand grew strongly across both businesses, accentuated by customer inventory build in the first half year. Croda's demand outpaced the broader market recovery, due to greater exposure to higher growth niche markets and next-generation applications, such as electric vehicles. Smart Materials continued to benefit from good sales for packaging, circular plastic and other polymer applications, delivering a 22% increase in underlying sales over 2020 and well ahead of pre-pandemic levels. The progressive recovery in industrial and automotive markets saw Energy Technologies grow underlying sales by 26%, to recover to pre-pandemic levels. Overall NPP sales grew in absolute terms and were broadly stable as a proportion of total Performance Technologies sales, at 18% (2020: 19%).

Sales
£439.5m
(2020: £373.6m)

Adjusted operating profit
£64.5m
(2020: £48.9m)

Industrial Chemicals

Market sectors

Industrial Chemicals

Industrial Chemicals activities have continued to support the overall efficiency of Croda's three principal sectors.

Industrial Chemicals has continued to support the overall performance of Croda's three principal sectors. After a period of lower sales reflecting re-engineering of a number of products and processes to reduce the volume of by-products produced, which have then traditionally been sold by this sector, the product portfolio was stable and sales grew with the upsurge in global industrial demand, together with robust pricing management.

Sales grew by 19% in reported terms to £114.8m (2020: £96.4m). Underlying sales were 25% higher, partly offset by adverse currency translation of 6%. Within underlying growth, price/mix was 15% higher, reflecting higher commodity prices, with volume 10% higher. IFRS operating profit increased to £6.5m (2020: £0.6m loss). Adjusted operating profit increased to £7.1m (2020: £0.3m loss). Return on sales increased to 6.2% reflecting the benefit of operating leverage, improved product mix and higher commodity prices.

Sales
£114.8m
(2020: £96.4m)

Adjusted operating profit
£7.1m
(2020: £-0.3m)

Divestment of the majority of Performance Technologies and Industrial Chemicals (PTIC)

In December 2021, we agreed to sell the majority of the PTIC businesses to Cargill Inc., for an enterprise value of €915m (approximately £778m). The business to be divested accounted for 77% of PTIC's 2021 reported sales and comprises five manufacturing facilities, together with associated laboratory facilities and sales operations. We are currently working on the process to separate the two businesses with completion expected in summer 2022. The consideration includes the sale of 100% of Croda Sipo in China, a joint venture which Croda currently manages and in which it has a 65% shareholding. If Croda's 100% ownership of Sipo cannot be realised, Sipo will be excluded from the PTIC sale, reducing the consideration by €140m. The overall disposal is subject to customary regulatory approvals but is not subject to shareholder approval. Under Cargill's ownership, the divested business and its talented workforce can look forward to a bright future.

With completion of the divestment expected in summer 2022, this transaction had no impact on the Group's reported results for 2021, except for costs incurred reported as an exceptional item. In these 2021 results, PTIC revenue totalled £554m (2020: £470m) and adjusted operating profit was £72m (2020: £49m).

Taking account of the value to be retained by Croda under a future supply agreement for products to be manufactured at Croda sites and supplied to the acquirer, together with dis-synergy costs remaining with Croda which were previously allocated to the divested business, the estimated impact of the divestment on Croda's reported 2021 results, had it occurred at the start of 2021, would have been to reduce revenue by £361m (2020: £298m) and adjusted operating profit by £59m (2020: £36m).

Creation of Industrial Specialities

With the agreement to divest the majority of PTIC reached in December 2021, the 23% of PTIC sales which will be retained within Croda will become the new Industrial Specialties sector. It will play a key role supporting Consumer Care and Life Sciences. It will support global site utilisation and profitability as part of Croda's integrated model in those areas of the business which are deeply embedded in Croda's regional operations, technologies and IP. Post-closing of the majority PTIC divestment, Industrial Specialties will also generate revenue and profit from a new long-term supply agreement, whereby Croda will supply certain products from its retained manufacturing sites to the acquirer.

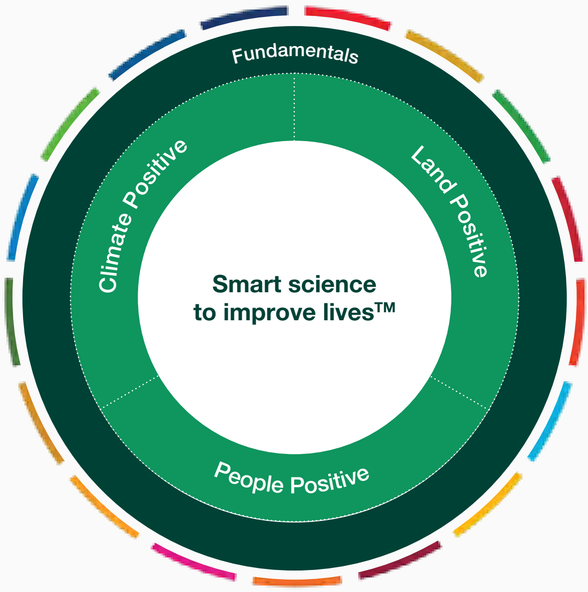
Post-closing, the Industrial Specialties sector will focus on supplying ingredients for its existing markets including coatings, emulsion technologies, water treatment and in fibres and fabrics. It will also leverage Croda's retained technology capabilities in markets such as display technologies and electronics, and a smart formulation capability in low-emission coatings. It will continue to manage tolling agreements and co-stream product sales from our sites which arise from Consumer Care and Life Sciences production processes.

Sustainability strategy – our Commitment

We are committed to being the most sustainable supplier of innovative ingredients. We will create, make and sell solutions to tackle some of the biggest challenges the world is facing. By 2030 we will be Climate, Land and People Positive.

Our Commitment

In 2020 we launched our Commitment to be Climate, Land and People Positive by 2030, externally benchmarking our targets with the support of the Cambridge Institute of Sustainability Leadership to ensure our ambitions align with expectations of a sustainability leader in our industry. Ours is a restorative strategy, designed to ensure that planet and society are better as a result of our activities, and that we are not just 'doing less bad'.



We also have important KPIs outside of these three categories, which we believe are crucial to the success of our business. We have collectively called these our Fundamentals. We consider these targets to represent the required social licence to operate in 2030 for a multinational company such as Croda.

The Sustainable Development Goals (SDGs), organised by the United Nations, underpin our Commitment. We have identified 23 SDG targets out of the 169, across nine goals, that are drivers of our strategy – those where we must reduce our negative impact and those where we can make the biggest positive contribution. These were then grouped around the themes of climate, nature and society, hence our Commitment to be Climate, Land and People Positive.

2021 materiality assessment

We conducted a full materiality assessment during 2021, concluding the fourth materiality assessment triennial cycle that started in 2012. This was our most comprehensive to date, with more data sources, direct contact with stakeholders and detailed analysis than ever before. Given the accelerating nature of the global sustainability agenda it was vital to 'take the temperature' of stakeholder expectations in 2021. A full report on the materiality assessment can be found in the accompanying Sustainability Report 2021 (page 14); the outcome of the assessment reconfirmed we are focusing on the right topics for most stakeholders, while we saw nature/biodiversity and global health preparedness increasing in importance since our last assessment in 2018.

As we deliver on our Commitment to be Climate, Land and People Positive by 2030 we anticipate satisfying an increasing number of our stakeholders' sustainability demands. In doing so we anticipate generating significant value for our customers' brands as they meet the needs of consumers, who in return will reward suppliers, like Croda, who help them achieve their own ambitious sustainability targets.

See our 2021 Sustainability Report for more detail
P14-15

2021 materiality framework

This grid provides a summary of the key issues identified through our materiality assessment and how they relate to Croda.

	Croda's impact on the world	The world's impact on Croda
Risk to Croda, therefore a challenge	C Climate action L Environmental stewardship F Process safety F Health, safety and wellbeing	L Circular economy C Global change preparedness
Material areas that range across axes	P Growing business for good P Diversity and inclusion C L F Product stewardship L Biodiversity	
Opportunity for Croda to provide a solution	C L P Product innovation P F Our people F Responsible business F Knowledge management P Community education and engagement P Growing business for good P Diversity and inclusion	F Supplier partnership F Customer intimacy

C Climate Positive
L Land Positive
P People Positive
F Fundamentals
Material areas that range across axes

2021 Performance

"I would like to recognise and thank everyone for the huge efforts made in delivering the 2021 progress towards the positive impacts on the planet and society to which we aspire."

Phil Ruxton, Chief Sustainability Officer

Climate Positive

27%
reduction in scope 1 and 2 GHG emissions intensity since 2020

1.5°C
Science-Based Target validated

951,000
tonnes CO_2e avoided through the use of ingredients attached to verified case studies

69%
of our organic origin raw materials were bio-based in 2021

Land Positive

33,734
hectares of land saved over 2019 baseline: our range of biostimulants, adjuvants and seed coatings continue to save more land than is used to grow all of our bio-based raw materials

Validated
Through extensive field trials with a major customer in Brazil, we measured and demonstrated the land saving benefit of our adjuvant technologies

Biodiversity
We recognise the benefits Croda technologies can bring in protecting biodiversity and nature, and have started a programme to measure our impacts in partnership with CISL

60%
of our land area saved is in Asia and Latin America, where there is greatest demand for food productivity and the highest threat of deforestation

People Positive

55
million people protected annually through the use of Croda sun protection ingredients

Supported
the global scale up of COVID-19 vaccine delivery and rapidly executed significant investments at manufacturing sites in the UK and USA

Six
projects approved for funding by Croda Foundation's Board of Trustees

36%
leadership roles held by women

Fundamentals

FAIRWAGE NETWORK
All employees temporary and permanent were paid a living wage at the end of 2021, according to Fair Wage Network criteria

17%
reduction in process safety incident rates compared to 2020

WORLD SUSTAINABILITY AWARDS 2021
Awarded Business of the Year at the World Sustainability Awards

94%
of palm derivative volumes purchased have supply chain transparency achieved to refinery

We are committed to providing full transparency on progress against our milestones, KPIs and 2030 targets, as well as the wide variety of other ESG data points requested by stakeholders. Please see our 'non-financial data performance summary' on croda.com to download our non-financial datapack.

Strategy in action – our targets

A review of our sustainability strategy by the Executive Committee in 2021 resulted in re-committing to the highest level of ambition across all our 2030 targets, despite a changing business portfolio.

Climate Positive

Scope 3 emissions analysis and external verification

In 2021 we established a clearer view of our supply chain emissions, conducting a thorough analysis of our scope 3 emissions, which is externally verified by Avieco.

The audit reduced our 2018 scope 3 baseline by approximately 104,500 tonnes CO_2e (7%) as our emissions were previously overestimated. This was primarily due to the accuracy of estimations and emission factors for our 'Capital goods' scope 3 category. Purchased goods is our largest category, accounting for 83% of our upstream scope 3 emissions, with the majority of this being raw materials.

Life cycle assessment studies for key raw materials have developed our knowledge of emissions within our supply chains and we are now able to represent the reduction in carbon footprint associated with purchasing palm certified by the Roundtable on Sustainable Palm Oil (RSPO). Around 40% of our scope 3 emissions associated with raw materials are covered by supply chain specific studies such as this. We also have volume-based, industry-recognised life-cycle assessment (LCA) figures attached to a further 35% of our raw material greenhouse gas emissions, leaving only 25% based on spend calculations. As our customers look to their suppliers to help them achieve their sustainability targets, understanding our scope 3 emissions and being able to identify opportunities to reduce our own emissions supports our customers as they seek more sustainable ingredients.

Our 2021 scope 3 emissions are 14.8% higher than our baseline year of 2018. This is largely due to greater investment and increased emissions associated with raw material purchases, due to increased production volumes. Business travel reduced by 75% due to the pandemic. This increased granularity allows us to identify carbon hotspots in our supply chain, and work with suppliers to drive emissions reductions.

Our scope 3 emissions are calculated using methodologies consistent with the WRI's Greenhouse Gas Protocol: Corporate Value Chain (scope 3) Accounting and Reporting Standard as well as the WRI's GHG Protocol Technical Guidance for Calculating scope 3 emissions. We use a hybrid approach to calculate our scope 3 emissions, using the following methods:

Process-based method – using actual consumption data on a given activity and the associated carbon conversion factor to calculate the emissions. Emissions factors have been sourced from:

- Croda's Life Cycle (LCA) Analysis tools for raw materials
- A Life Cycle Analysis database (Ecoinvent)
- Life Cycle Analysis studies published by other reputable sources
- Published conversion factor sets for reporting on organisational GHGs (DEFRA/IEA)

Extended Environmental Input-Output (EEIO) model method – using spend data, emissions are calculated using EEIO models to quantify the emissions associated with a sector of the economy in a given geography

To calculate our applicable scope 3 emissions, extensive EEIO modelling was carried out. This method combines macro-economic data and industry-level carbon emissions data to estimate the carbon associated with financial activity in a given sector and geography. This approach provides us with the tools to carry out a complete assessment as well as identify carbon hotspots across the value chain, ensuring we focus our attention where it matters most. Where actual consumption data is available the process-based method is applied, as this is a more accurate estimation of our scope 3 emissions. The process-based method includes LCAs from a range of sources, and published conversion factors as described above.

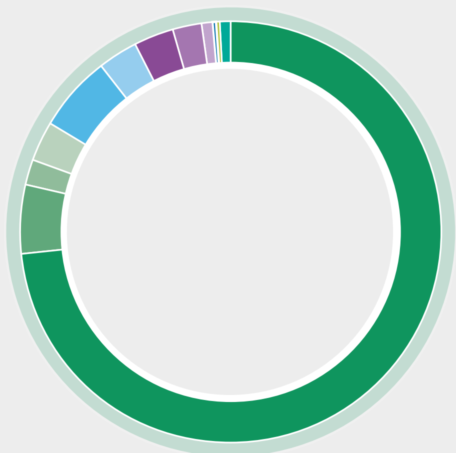
Driving operational decarbonisation

An internal shadow carbon price of £50 per metric tonne CO_2e was applied to all major capital investment proposals during 2021.

However, we realise that initiatives aimed at reducing emissions at manufacturing sites alone will not be enough to achieve our 1.5°C science-based target. We are also developing low carbon alternatives to existing ingredients. To support this, we have developed a methodology to calculate scope 1 and 2 emissions at a product level. By including the sales of all products, we can now track our scope 1 and 2 carbon footprint at the sector level, driving ownership and focusing our management teams on creating the alternative low carbon solutions our customers require.

For the first time in 2021, major sectors presented their carbon budget to the Executive Committee alongside their financial budget. They presented their forecasted carbon emissions for 2022, as well as actions to ensure emissions remain within budget and are aligned to achieving our Science-Based Target (SBT). In 2022 we will add scope 3 emissions associated with raw materials into these calculations, further improving sector visibility of their carbon footprint.

2021 scope 3 emissions by category



2021 scope 3 emissions: 1,141,056 $teCO_2e$
(2018 baseline: 994,235 $teCO_2e$)

Land Positive

Validating our land saving assumptions

Our Land Positive targets focus on land use and crop science innovation. To enable us to identify areas where we can have the maximum impact on land use, we need to know our current land impact. In 2021 we collaborated with one of our major agriculture customers to validate the assumptions used to calculate our land saving data for our adjuvant technologies, demonstrating that our assumptions are justified and, in fact, conservative.

2021 also saw us make significant steps towards how we will achieve our crop science innovation target, opening our Product Validation Centre located in Holambra near São Paulo, Brazil. This state-of-the-art facility includes laboratories and greenhouses and is focused on validating and substantiating claims and results from our formulation, microbiology and seed treatment laboratories. Managed by a specialist team that includes agronomists, chemists and biologists from Crop Protection and our Seed Enhancement business, Incotec, the centre has the highest level of technical expertise, generating realistic and robust data for customers.

This specialist team, now all under one roof, enhances our ability to develop innovative new solutions and explore the use of digitalisation and new technologies to create more sustainable ingredients.

People Positive

Collaboration to develop alternative vaccine adjuvants

In 2021 we established a strategic collaboration with the Danish Government's life science research institute, Statens Serum Institute (SSI). This will enable accelerated trials of alternatives to traditional aluminium-based adjuvants, providing new opportunities for the development of vaccines for diseases where effective vaccines do not currently exist, as well as more effective vaccines for a range of diseases.

The collaboration encompasses manufacturing and commercialisation of two novel adjuvants, both of which are in clinical development. Studies show that both adjuvants induce strong immune responses, with one inducing both antibody and T-cell response and the other, which is already in use within cancer immunotherapy trials, facilitating production of CD8+ T cells.

This agreement, along with the significant investment at manufacturing sites in the USA and UK made in 2021, will increase our capability and capacity to support World Health Organisation (WHO) pipeline vaccine development in the future. This takes us one step closer to achieving our ambition of supporting the successful development and commercialisation of at least 25% of WHO listed priority pipeline vaccines. See page 27 for more on our investments in Health Care.

Driving growth through an embedded strategy

SUSTAINABLE DEVELOPMENT GOALS

Sustainable Development Goals

It is estimated that there is US$12 trillion incremental economic value to be gained if the world meets all 169 targets associated with the United Nations Sustainable Development Goals (SDGs), delivered through technology innovation, new markets and new business models.[1]

Economic value of SDGs

$12 trillion

to be gained if the world meets all 169 SDG targets[1]

Impact beyond our direct operations

Our impact on the SDG targets is far greater through our supply chain and our customers than just through our own operations (see business model page 16).

To meet the sustainability expectations of our customers we need to measure, manage and reduce the negative footprints of our raw materials before they even reach our gates. For example the carbon, water and land footprints embedded in our raw materials are typically many times larger than the footprint associated with our own activities.

We are starting work with partners in our supply chains to identify programmes that will do more than reduce negative footprints and will restore and improve communities and ecosystems.

By innovating thoughtfully, sourcing sustainably, minimising the footprint of our own operations and leveraging our excellent decentralised customer intimacy, we will play our part in helping our customers and their markets deliver on the SDG targets.

Aligning the whole organisation to deliver on our Commitment

Through our decentralised approach to decision-making and can-do attitude, we can mobilise the whole of Croda in our sustainability journey, enabling us to respond to local variations in requirements from stakeholders and adjust our approach as the sustainability agenda evolves.

Our Purpose and our Commitment are also proving to be vital recruitment and motivational tools for existing and future employees, enabling us to engage with the best possible candidates and support further development of our staff.

We are taking several approaches to support this and ensure we align all our activities. We have included Climate, Land and People Positive factors in our long-term incentive scheme for the most senior leaders; we have created regional Sustainability Champions Networks to engage those passionate individuals around the organisation who can contribute to local execution and share best practice; and by the end of 2022 we will have doubled the resources across the organisation focused on sustainability, beyond the central Group Sustainability team.

Creating value as we help our customers achieve their sustainability ambitions

Consumer-facing companies responding to societal demands and increasing regulation in every market and region we serve have guided much of our work in prioritising the growing sustainability agenda to develop our Commitment.

Our customers are diverting resources towards partnerships with those suppliers who help them meet their purpose and longer-term sustainability targets. Through our intimate relationships with customers large and small across the world we are helping them achieve these non-financial targets and, in so doing, we are creating the opportunity for further value growth.

1. 'Better Business, Better World' report, Business Sustainable Development Commission, Jan 2017

At the heart of our approach to meeting our Commitment is innovation, which has been the lifeblood of our success for many decades.

Innovating the right solutions for the planet and society in the right way

At the heart of our approach to meeting our Commitment is innovation, which has been the lifeblood of our success for many decades. Our business model has relied on creating new market niches with novel product offerings to drive growth. This approach remains relevant today, in the UN Decade of Action on the SDGs, with our innovation priorities focused on helping our customers and end markets deliver on the SDG targets, with 88% of new products directly contributing to our priority SDGs.

Our innovation model is a decentralised one, with our R&D advances increasingly driven by our partnerships, often managed locally by one of our innovation centres around the world, close to customers and partners. This ensures we can respond to local variations in approach to contributing to the SDGs, and access novel processes, raw materials and expertise through our partners.

Assessing the risks and opportunities

Risks and opportunities associated with delivering the various aspects of the sustainability agenda are captured using our global integrated risk management framework (page 50). In general, we identify more sustainability related opportunities than risks to the Croda business model.

In 2021 we adopted TCFD guidance to report our climate related risks and opportunities (pages 40 to 43).

Our Commitment

23 SDG targets

underpin our strategy

Measuring our growth against the SDGs

Having previously identified the SDG targets that directly connect with our Commitment (see Sustainability Report 2020 page 11), this year we have mapped out how those SDG targets can be impacted through the use of our products in the markets in which we operate, considering our product offering into those markets and the primary supply chains and operations that provide them.

We plan to continue this assessment in the coming years to develop a means of assessing our revenues and profitability by SDG target. The table below presents a summary of the SDG targets our activities impact, broken down by sector and business unit:

		Consumer Care				Life Sciences			PTIC		
	SDGs	Beauty Care	Beauty Actives	Home Care	Fragrances & Flavours	Seed Enhancement	Crop Protection	Health Care	Energy Technologies	Smart Materials	Industrial Chemicals
Value chain	8 Decent work and economic growth	8.5	8.5	8.5	8.5						
Value chain	12 Responsible consumption and production	12.2 12.7	12.2 12.7	12.2 12.7	12.6 12.7	12.2 12.7	12.2 12.7	12.7	12.7	12.2 12.7	12.2 12.7
Value chain	13 Climate action	13.2					13.2		13.2	13.2	13.2
Value chain	15 Life on land	15.2 15.5	15.5	15.2 15.5	15.2 15.5		15.2 15.5	15.2		15.2 15.5	15.2 15.5
Operations	3 Good health and well-being	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Operations	4 Quality education				4.3						
Operations	5 Gender equality		5.5		5.5						
Operations	6 Clean water and sanitation	6.4		6.3 6.4	6.4	6.3	6.3 6.4		6.3	6.3	6.3
Operations	7 Affordable and clean energy	7.2		7.2		7.2	7.2	7.2	7.2	7.2	7.2
Operations	8 Decent work and economic growth				8.8						
Operations	9 Industry, innovation and infrastructure	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Operations	12 Responsible consumption and production	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Products & Services	2 Zero hunger					2.3 2.4	2.3 2.4				
Products & Services	3 Good health and well-being	3.4						3.3 3.4			
Products & Services	7 Affordable and clean energy	7.3		7.3		7.3	7.3	7.3	7.3	7.3	7.3
Products & Services	13 Climate action			13.2		13.2	13.2	13.2	13.2	13.2	13.2
Products & Services	14 Life below water	14.1	14.1	14.1		14.1	14.1		14.1		
Products & Services	15 Life on land					15.3	15.3				

Delivering value through our culture

Culture creating value and driving performance

Our people strategy is focused on delivering our Purpose, further strengthening our culture and creating inclusive and engaging environments for all. We believe that embedding our values throughout the organisation will enable us to attract and retain the best talent, unlock our people's full potential and deliver high performance and engagement within our teams. During 2021, a new set of 14 competencies aligned with our values of 'Responsible', 'Innovative' and 'Together', were introduced. Each competency describes how the values are exhibited and can be developed through specific behaviours within our work. A cross section of Croda employees from across the globe assisted in the shaping of the competencies and will continue to be involved in the implementation and ongoing review. This has been a positive and exciting step forward in our journey as for the first time we have a description of the attitudes, skills and behaviours valued within Croda, that are shaped by our values and underpinned by our culture.

Values

Embedding new competencies, that support our values, has been a priority within our learning and development teams and an integral part of our leadership development. This year, we have introduced a number of new programmes and activities which are aligned directly with our new competencies.

Responsible – Authentic leadership training

Authenticity is part of our new competency framework and encourages self-awareness and working in a way that is aligned with inner values. We invited a number of our teams across the organisation to take part in an Authentic Leadership Development programme. The programme explains the importance of understanding purpose, acting with integrity and building relationships which are founded on trust. It uses psychometric evaluation and is facilitated by external consultants.

Innovative – Phoenix Rising

We introduced a new concept programme to our leadership development with a difference, called Phoenix Rising. It is routed in inclusive behaviours and attendees come from multiple levels and functions across the organisation, to connect through experiences and discussions. It is an opportunity to coach, mentor and reverse mentor each other, through different perspectives. This programme facilitates the integration of our Purpose, values and behaviours of our people through leadership and the programme is facilitated by external consultants.

Together – Leading with empathy

To develop our understanding of the role empathy plays, particularly in uncertain times, our Executive Committee and senior leaders attended webinars on the importance of leading with empathy. The webinars used neuroscience to explain the important role empathy has in creating inclusive, innovative and psychologically safe working environments. We have opened up our new development planning tool to all employees, at all levels. To make development planning easy and accessible, we have included new competency-based playlists.

Competencies

Responsible

- Authenticity
- Cross cultural sensitivity
- Inclusivity
- Living the values

Innovative

- Curiosity
- Strategic perspective
- Adaptability
- Delivery

Together

- Working together
- Empathy
- Care and compassion
- Managing conflict

Foundation competencies

- Self-led learning
- Technical/functional expertise

Talent development

Our learning and development programmes have been reviewed with the aim of modernising and aligning to our values and competencies. We have begun redesigning our internal offering with a plan to launch these programmes during 2022.

A number of leadership behaviours aligned to our values were identified which will form part of selection and nomination to leadership development opportunities going forward.

How we manage and measure culture

Our approach to monitoring culture is through direct engagement with our people:

Area	Reason to use	Example of use
Pulse surveys	Used to give the perspective of our people, helping leadership teams to understand employee sentiment on areas of interest or concern.	In 2021, we deployed a survey concerning the strategic review of the PTIC businesses. We asked a series of questions, including a specific question related to our values; "I believe Croda is committed to carrying out the review process in line with our values, keeping everyone informed of progress". 74% of responses agreed or strongly agreed, with 22% giving a neutral response.
Listening groups	A feedback channel used globally and regionally to enable employees to share their positive and negative experiences on given topics.	We regularly hold listening groups or offer feedback sessions, such as town hall meetings. In 2021, members of the Board including the Chair, Anita Frew, hosted several sessions with participants from all around Croda to discuss strategic priorities, pressures and to get input and ideas.
Purposeful outputs	Rewarding and sharing examples of where employees have truly lived our values.	The first annual 'Purpose in Action Awards' was held in summer 2021, with over 150 award entries from all our regions. The awards were established to recognise teams and individuals that had delivered actions that contribute towards either our Commitment or our values. Each entry demonstrates how we are truly living our Purpose and that Croda's culture is actively driving change.

Driving innovation through D&I

All of our new competencies encompass inclusive behaviours with one dedicated to inclusivity. We believe that every employee should feel able to come to work, give their best and feel valued for the work they do. To drive progress we created a D&I Roadmap. The roadmap has a number of areas including data gathering, improving awareness, developing our brand, measurement and setting of KPIs, and alignment to reward and recognition. Data gathering was focused on understanding representation within Croda and how our organisation feels.

This was done through pulse surveys, reviewing employee data and benchmarking against external sources. Raising awareness, particularly at senior levels, focused on deepening knowledge about the experiences of different groups of people; the programme included external speakers, internal podcasts with our employees, and delivering unconscious bias training. A strategic objective achieved in 2021 was the delivery of a Global Diversity Representation Survey*. Carried out across all regions where data collection was legally allowed, it is a first for Croda and is an important step in understanding the broad representation in our organisation.

The survey consisted of brief questions asking employees to volunteer information about their race / ethnicity, sexuality, gender identity, and disability. Due to legal restrictions on collection of data, not all locations were able to participate including sites in the Netherlands, Finland and Denmark. 70% of eligible employees responded to the survey, including 97% of senior leaders. A summary of the results can be found below.

Global Diversity Representation Survey results*

	Group average	Senior leader average
Identify as female	41% of responses	39% of responses
Identify as male	53% of responses	60% of responses
Identify as intersex, transgender, non-binary or other gender identity	Less than 1% of responses	Less than 1% of responses
Identify as a minority race or ethnic group in the country they are located, based on local social, government or cultural understanding	12.8% of responses	9.8% of responses
Identify as a person with a disability	3.5% of responses	1.8% of responses
Identify as lesbian, gay, bisexual, queer or a sexuality other than heterosexual	3.8% of responses	1.8% of responses

We have published this data internally and will continue with further surveys periodically to help us track our progress. As the survey closed in late 2021, we are currently reviewing next steps and appropriate actions. In addition, and linked to reward and recognition for 2022, we have a specific gender balance target in our long-term incentive Performance Share Plan. We will continue to promote and appoint on merit, but we will work to ensure that we have balanced shortlists and create an environment where female employees can flourish, and believe this incentive will help us to achieve this. As part of our approach to understanding local inclusion and diversity needs, our regional teams have set up new D&I sub-committees to complement the Global D&I Committee. These teams are focused on driving awareness and shaping decisions at a local level. Over the last year, each sub-committee has begun reviewing areas of local need, creating plans and working with local leadership teams to create change.

* The survey ran from June to October 2021 as a voluntary survey with data collected anonymously at point of collection.

Key people metrics

Average headcount for 2021:

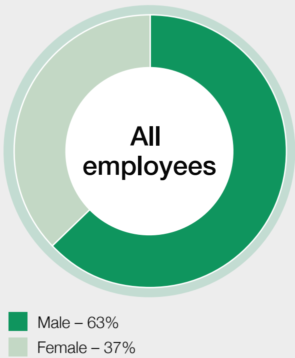
6,037

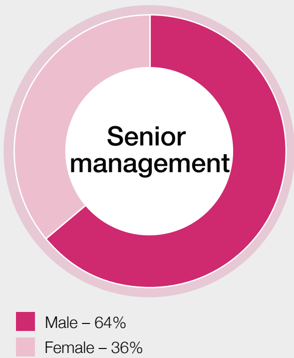
	% of workforce
Permanent employees	96.6%
Temporary employees	3.4%
Full time employees	94.9%
Part time employees	5.1%

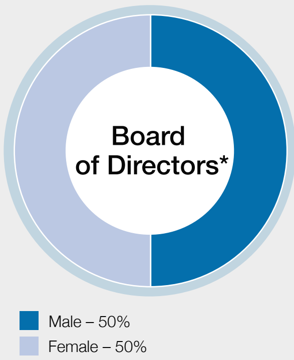
Age category	% of workforce
17-25	6.3%
26-35	29.6%
36-45	28.2%
46-55	23.2%
56-65	12.2%
65+	0.5%

All employees are paid a Living Wage.

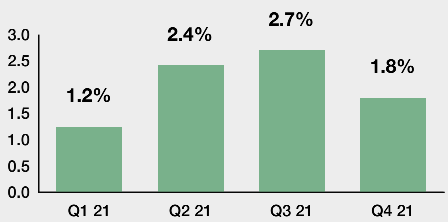
Year end gender breakdown of our workforce^







Employee turnover by quarter, 2021



This chart shows our voluntary employee turnover rate by quarter for 2021. As this chart is for our global business it includes regions such as Asia and the USA that traditionally experience higher employee turnover than Europe. In Q2 and Q3 this year we experienced higher turnover rates, in line with many other organisations around the world. Fortunately, we are already seeing our turnover starting to reduce to more typical levels. We continue to monitor turnover and conduct exit interviews with leavers, the results of which are shared widely in the organisation to inform our people policies and practice.

* As at 28 February 2022. Post-year end appointment means we have now achieved full gender balance on the Board of Directors. See page 61 for detail.

^ Reported figures specifically from HR systems only factor male and female binary, we are aware that <1% of employee headcount is likely to not identify as male or female.

Transparency and disclosure

Since 2007 we have reported using the Global Reporting Initiative (GRI) framework, following GRI guidance on identifying and reporting against indicators material to our business.

With the rapidly increasing demands for transparency and disclosure from many stakeholders, investors and analysts in particular, we have committed to increase our reporting alignment with the Sustainability Accounting Standards Board (SASB) framework. In 2021 we have utilised the SASB process safety indicators as the basis for measuring and reporting our Process Safety progress, one of our Fundamental KPIs (see Sustainability Report, page 37). We are also conducting an analysis of our public disclosures and internal data capture versus the entire SASB framework and have started work to close the gaps.

While we anticipate further alignment with SASB in 2022, we are also monitoring the transformational development in global sustainability standard setting. In June 2021 SASB and the International Integrated Reporting Council (iiRC) announced they would merge to form the Value Reporting Foundation (VRF) and, at COP26 in November, the IFRS Foundation announced the launch of the International Sustainability Standards Board (ISSB) to run alongside the International Accounting Standards Board (IASB). ISSB has already reached agreement with VRF and other sustainability reporting standard setters to pool resources and expertise to develop unified global sustainability standards for reporting and disclosure. We will work with our stakeholders and the standards boards to identify how we will maintain disclosure compliance.

We support the aims of the Task Force on Climate-related Disclosure and are adopting their reporting recommendations to aid both our understanding of climate change on our business, and of our business on climate change (see pages 40 to 43).

Non-financial information statement

The table below sets out where more information can be found in our Annual Report (AR) and Sustainability Report (SR) that relates to non-financial matters, as required under the Non-Financial Reporting Directive.

Reporting requirement	Some of our relevant policies	Read more about our impact and metrics	Annual Report page	Sustainability Report page	Principal risks
Environmental matters	Group SHE policy[1]	Process Safety	P31 & 54	P34 & 37	Major safety or environmental incident (P54)
	Supplier Code of Conduct[2]	Environmental Stewardship		P34 & 37	
		Product Stewardship		P35 & 40	Delivering sustainable solutions (P53)
		Sustainable Sourcing and Supplier Partnership	P42	P35 & 41	
		Climate Positive	P32	P20 to 25	
		Land Positive	P33	P26 to 29	
Employee matters	Code of Ethics[2]	Delivering value through our culture	P36		Our people (P54)
	Code of Conduct[2]	Key people metrics	P37		Ethics and compliance (P55)
	Group Policy on Training and Development[2]	Workforce engagement	P90		
	Equal Opportunities policy[2]	People Positive	P33	P30 to 33	
	Group SHE policy[1]				
Respect for human rights	International Human Rights policy[2]	Living Wage	P92		Our people (P54)
	Group policy on Discrimination[2]	Fair income		P35 & 38	
	Code of Conduct[2]				
Social matters	Code of Conduct[2]	Driving innovation through D&I	P9, 12, 37, 77 and 92		Our people (P54)
	Group Policy for Managing Diversity[2]				
	Transgender policy[2]				
Anti-bribery and corruption issues	Code of Conduct[2]	Responsible business		P34 & 38	Ethics and compliance (P55)
	Countering bribery[2]	Ethical compliance	P83		
	Croda Modern Slavery Statement[2]				
	Whistleblowing Policy[2]				
	Competition Law Policy[1]				
	Croda Fraud Policy[1]				
	Ethics Procedures Manual[1]				
Business model	Our Purpose[2]	Business model	P16		All key risks on P53 to 55 link to our business model
	Our Commitment[2]				

1. Available to employees via the Company intranet (Connect), not published externally.
2. Available to employees via the Company intranet (Connect) and published on www.croda.com.

Tackling the climate emergency

The urgent need for society to tackle the climate emergency was highlighted during 2021. The United Nations Conference on Climate Change (COP26) showed that governments and businesses must both play their part in moving from ambition to action if we are to limit global temperature rises to no more than 1.5ºC above pre-industrial levels and prevent the most catastrophic effects of climate change.

As a signatory to the UN Global Compact Business Ambition for 1.5°C and member of the Race to Zero campaign, we are demonstrating leadership on climate action in an industry that is recognised as hard to decarbonise. In July 2021, this leadership continued as we became only the third major chemical company globally to have a 1.5°C Science-Based Target validated and declare our ambition to be net zero* by 2050.

Emissions target: By the end of 2029 we will have reduced our operational (scope 1 and 2) emissions by 46.2% from a 2018 baseline. With the majority of our emissions within our supply chain, we also had our scope 3 target approved by the SBTi, to reduce our absolute upstream scope 3 emissions by 13.5% over the same time frame. The focus here is to engage and work with suppliers to reduce emissions associated with sourcing raw materials (see page 32) alongside transportation and distribution of products to our customers. By taking actions to achieve these targets within our operations and supply chain we can support our customers and enable them to meet their own supply chain SBT emission reduction targets.

Sustainable innovation target: In addition, we also have a sustainable innovation target to achieve 75% of our organic raw materials by weight to be bio-based. These absorb carbon as they grow, and using them allows us to minimise our impact on the environment by designing lower-footprint products. In 2021 we continued to show progress, achieving 69% (2020: 67%) bio-based organic raw materials.

Carbon cover target: Climate Positive, for us, means more than achieving net zero emissions by 2050. Through our carbon cover target we aim to help customers and consumers save or avoid four times the emissions associated with our entire value chain (scope 1, 2 and 3). In 2021 we helped customers avoid 951,000 tonnes CO_2e (2020: 838,000 MT CO_2e).

For more, see our 2021 Sustainability Report.
P20-23

* Net zero means eliminating almost all scope 1 and 2 emissions and significantly reducing our upstream scope 3 emissions, with any residual supply chain emissions permanently offset through fully validated and approved schemes.

Greenhouse gas scope 1 and 2 emissions and intensity charts

Since 2018, our baseline year, our total scope 1 and 2 greenhouse gas (GHG) emissions have reduced by 12.7%. Within this, scope 1 emissions increased by 4%, whilst we have seen a 60% reduction in scope 2 emissions. This has been driven by a switch to renewable electricity across our manufacturing sites. In 2021 we engaged with Accenture to help us with renewable electricity sourcing options for our manufacturing sites in Asia, where availability of green electricity is more challenging. Renewable Energy Certificates (RECs) purchased at Thane in India and Singapore have led to a significant reduction in emissions this year.

Scope 1 and 2 GHG emissions from our UK operations were 34,559 $TeCO_2e$ in 2021 (2020: 35,692 $TeCO_2e$) representing approximately 19% of our global GHG emissions.

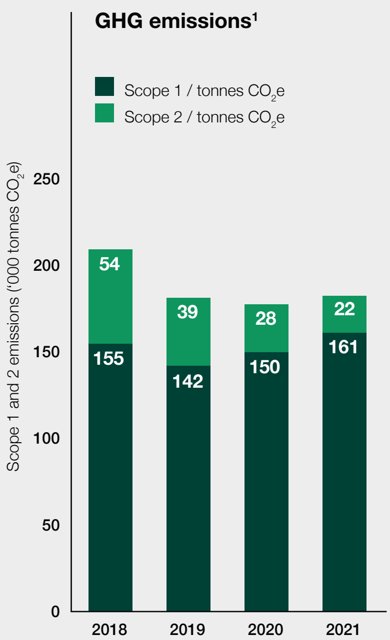
Our chosen measure of GHG emission intensity divides our GHG emissions (market-based scope 2 emissions) by value added[2], a measure of our business activity. Since 2018, our GHG emissions intensity has improved by 39%, illustrating how we are decoupling growth from our environmental impact.

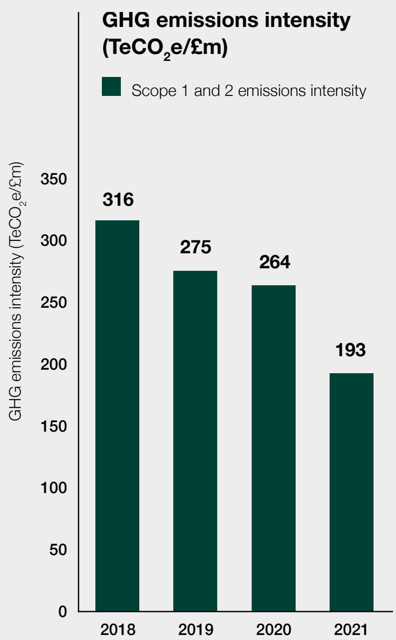
Our scope 1, 2 and 3 GHG emissions are verified by Avieco. Their formal independent verification statement is available at: www.croda.com/carbonverification

Energy consumption and efficiency improvements

In 2021 we consumed 1,178,117,781 kWh (2020: 1,125,612,495 kWh) of energy across our global operations. This included 219,130,734 kWh (2020: 222,759,173 kWh) consumed by UK operations.

As part of our strategy to improve the efficiency of energy consumption, 36 projects were implemented globally, realising 39,514,274 kWh of annualised efficiency improvements, equivalent to 9,063 $TeCO_2e$ avoided emissions.





1. Our GHG inventory has been completed in accordance with the Greenhouse Gas Protocol, Corporate Accounting and Reporting Standard (Revised Edition). Scope 1 emissions are calculated using Defra Government emission conversion factors for greenhouse gas company reporting. Scope 2 emissions are market-based.
2. Value added is defined as operating profit before depreciation and employee costs at reported currency.

Emissions and energy usage

	2021			2020		
	UK	**Rest of world**	**Total**	UK	Rest of world	Total
Scope 1/tonnes CO_2e	**34,321**	**126,514**	**160,835**	35,279	114,342	149,621
Scope 2/tonnes CO_2e	**238**	**21,390**	**21,628**	413	27,430	27,843
Total scope 1 and 2 / tonnes CO_2e	**34,559**	**147,904**	**182,463**	35,692	141,772	177,464
Scope 1 energy use / kWh	**185,948,678**	**753,882,423**	**939,831,101**	189,846,081	708,638,453	898,484,534
Scope 2 energy use / kWh	**33,182,056**	**205,104,623**	**238,286,679**	32,913,091	194,214,869	227,127,960
Total Energy use / kWh	**219,130,734**	**958,987,047**	**1,178,117,781**	222,759,173	902,853,322	1,125,612,495

Task Force on Climate-related Financial Disclosures (TCFD)

Croda has long recognised the scale of the climate emergency and considers this to offer both opportunities and risks to our future growth. We consider actions to mitigate these risks as a core part of delivering our strategic Commitment to be Climate, Land and People positive (page 30). As a 'Race to Zero' partner and a signatory to the UN Global Compact's Business Ambition for 1.5˚C we committed to set an ambitious 1.5˚C 2030 Science Based Target (SBT) and become net zero by 2050. In July 2021 we became the third major chemical company in the world to have these SBT commitments verified. We continue to integrate our climate related disclosures throughout our Annual Report and our Sustainability Report. The Sustainability Report provides an opportunity to explain our approach in more detail and to provide case studies to illustrate our progress.

		Compliance	Next steps and timeframes
Governance	**a.** Describe the Board's oversight of climate-related risks and opportunities.	The Board oversees the setting and delivery of the strategy and is accountable for all risks, including climate related risks. In 2021 the Board completed a strategic deep dive of the sustainability strategy including opportunities and risks (page 65). The Board considers all principal risks, including climate related risks, in its annual review (page 66). The Board receives a quarterly update of progress against sustainability targets from the Executive Committee, including an update on key risks and opportunities against which specific actions have been identified (page 64). In 2021 a member of the Board attended the Executive sustainability strategy review (of which climate is a key pillar).	The Board's agenda for 2022 includes a full review of sustainability progress and externally provided sustainability education, both including climate related risks and opportunities.
Governance	**b.** Describe management's role in assessing and managing climate-related risks and opportunities.	Assessment, management and monitoring of climate related risks is governed through the Sustainability Committee, which meets quarterly and which is chaired by the Chief Sustainability Officer, Phil Ruxton. This is a formal sub-committee to the Executive Committee (page 73), with delegated authority to oversee the development, measurement and delivery of our sustainability KPIs across the four pillars of our strategy: Climate, Land, People and Fundamentals (page 30). The Committee is also responsible for Group communications and recommendations to further develop our strategy. It comprises members of the Executive Committee and senior leaders from across Croda, with each member responsible for delivery of specific 2030 targets across the Climate, Land, People and Fundamentals pillars. In 2021, our CEO led the Executive Committee in a review of our sustainability strategy supported and informed by the investor community (case study on page 19) and we held our second carbon summit for senior leadership.	The Sustainability Committee will continue to monitor and report on the delivery of the programme throughout 2022. For 2022, our PSP includes sustainability metrics which relate to reductions in emissions (page 96); directly linked to our Climate Positive commitment.
Strategy	**a.** Describe the climate related risks and opportunities the organisation has identified over the short, medium, and long-term.	Through our global risk management process, we have identified 41 climate related opportunities and risks covering the short, medium and longer term, covering both transitional and physical causes as defined by the TCFD. They relate both to Croda's impact on the environment and how our products help our customers to manage their own climate impact, and to the impact of environmental change on Croda including increased raw material costs, carbon pricing, emerging regulation and the effects on our people and working environment. We describe four of these risks in more detail on page 43 and we will consider how to disclose our risks and opportunities in additional detail in future Annual Reports. Our sustainability materiality framework table, described on page 30, summarises risks and opportunities identified from our 2021 materiality assessment and there is further detail on pages 14 to 15 of our Sustainability Report.	We will consider how to disclose our risks and opportunities in more detail in our 2022 Annual Report.
Strategy	**b.** Describe the impact of climate related risks and opportunities on the organisation's businesses, strategy, and financial planning.	Climate related opportunities form one of the three pillars of our sustainability strategy, to become Climate Positive by 2030 (page 30). As a core part of our business strategy equation, sustainability + innovation = growth, the impact of not delivering our climate related pillar is significant and hence we recognise this in our principal risks on page 53. We assess the impact of our risks, and the benefits of our opportunities using the six point grading scale defined in our risk framework (page 52). In agreement with our core banking group, the interest rate on our principal committed banking facilities is reduced if we reduce our carbon use every year by a specified amount. If this is achieved then we will reinvest this saving in sustainability projects (case study on page 36 2019 Annual Report). During 2021 we completed detailed analysis of the impact of four climate related risks against three future climate scenarios and the results are shown on page 43. We summarise our GHG commitments and plans to reduce emissions on page 39 and provide further detail on page 20 to 23 of our 2021 Sustainability Report.	A further four climate related risks will be subject to full scenario assessment in 2022. Although interdependencies between risks are identified, further work will be focused in this area in 2022 to make these interdependencies more transparent.
Strategy	**c.** Describe the resilience of the organisation's strategy, taking into consideration different climate related scenarios, including a 2°C or lower scenario.	During 2021 we undertook (with support from a third party) detailed scenario analysis of four (10%) of our climate related risks/opportunities (two transitional and two physical), to determine the degree of resilience in our strategy. Financial impact was assessed using the same base financial model used for both going concern and viability statement assessments. Three climate change scenarios were considered: Orderly (+1.5°C), Disorderly (+2°C) and Hot House (+3°C) across six five-year time horizons to 2050. Our scenario process and the results from our 2021 assessment are summarised in more detail on page 42 and 43.	We will continue to assess the resilience of our climate strategy through further scenario analysis in 2022.

In the TCFD table below we have summarised material climate related financial disclosures consistent with the four recommendations and the eleven recommended disclosures proposed by TCFD. Further detail of these can be found throughout our Annual Report and Sustainability Report as referenced. As we continue to align our approach to the updated TCFD additional guidance which was released in October 2021 (Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures (2021 TCFD Annex)) there are some recommendations that we continue to consider how to more completely explain. Our work will continue throughout 2022 with the intention of providing fuller disclosure in our 2022 Annual Report as required by the Listing Rules.

		Compliance	Next steps and timeframes
Risk management	**a.** Describe the organisation's processes for identifying and assessing climate related risks.	The process for assessing and identifying climate related risks is fully embedded as part of our global risk management process which is described on pages 50 to 52. When new and emerging risks or opportunities are identified they are assigned a business owner and are prioritised using our 6x6 risk assessment scale to determine their potential impact and likelihood. We identify climate related risks across all categories of our risk management framework: Strategic, People and Culture, Process, External Environment (which includes external regulatory) and Financial, and include security of raw material supply, supply chain, existing/emerging regulation and people. Risks and opportunities are grouped as either having transitional or physical causes as defined by the TCFD. When considering principal risks we pull all sustainability risks together within our 'Delivering sustainable solutions' risk (page 53) which was added as a standalone principal risk in 2019, recognising its significance to both ourselves and our customers.	The identification of emerging risks and opportunities and the assessment of our current risks will continue through our global risk management process (page 52).
	b. Describe the organisation's processes for managing climate-related risks.	In line with our model of decentralising the management of risks and opportunities to the first line, to be close to the point of action ownership, day-to-day management of climate related risks and opportunities is delivered by named owners globally. Our small central Group Sustainability and Sustainable Sourcing functions provide expertise and manage third-party relationships. In 2021 we founded regional sustainability champions to catalyse activity and share best practice at local level. Climate related risks and opportunities, and their mitigating controls and actions are captured in our global risk management system, the Digital Hive which provides transparency of risks and reporting (page 50). Delivery of our climate pillar is led by a named senior leader and progress is reported at the quarterly Sustainability Committee.	We will continue to support risk owners in managing risk with the support of the regional sustainability champions.
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	The process for assessing and identifying both current and emerging climate related risks and opportunities is the same as for all our risks and uses our global risk framework which is described on pages 50 to 52 of this report. In 2021 we conducted our fourth materiality assessment (page 30) to take the temperature of stakeholder expectations and assess sustainability risks and opportunities for Croda, including those relating to climate.	Following the completion of our 2021 materiality assessment, emerging risks and opportunities identified will be added to the Digital Hive where they do not already exist.
Metrics & targets	**a.** Disclose the metrics used by the organisation to assess climate related risks and opportunities in line with its strategy and risk management process.	The metrics which we use to assess climate related risks and opportunities are described in more detail on page 31 of this report, with further detail in our 2021 Sustainability Report (page 20). A full ESG data pack has been developed and is downloadable from croda.com. We include the emissions metric in our key performance indicators on page 44. In 2021 we invested in market leading technology to collate and automate internal reporting of our metrics and trained employees having data entry and valuation responsibilities. We describe our internal carbon pricing on page 32.	In 2022 we will roll out customisable metric dashboards to management, undertake an internal audit review of non-financial KPI processes and procedures (page 81), and include emissions metrics as part of our PSP (page 96).
	b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	Scope 1, 2 greenhouse gas emissions and our calculation methodology are disclosed on page 39. In 2021 we established a clearer view of our supply chain emissions, undertaking a thorough analysis of our scope 3 GHG emissions, which was externally verified by Avieco (page 32). Life cycle assesment studies for key raw materials were also updated in 2021 (page 32). For more detail on our scope 3 methodology see our Sustainability Report page 22).	Based on our 2021 scope 3 carbon assessment, we will continue to work to decarbonise our supply chains.
	c. Describe the targets used by the organisation to manage climate related risks and opportunities and performance against targets.	As part of our sustainability strategy review in 2020, new climate related objectives and targets were set for 2030, which are laid out in more detail on page 20 of our Sustainability Report. Three key targets are identified (page 39): reducing emissions (including scope 1, 2 and 3 greenhouse gas emissions), sustainable innovation and carbon cover, each of which has clearly identified targets and milestones defined.	

2021 climate scenario analysis (CSA) modelling

Scenario analysis helps us to understand the potential impact of climate change on our future business, to inform our strategy and future business planning.

Methodology

The CSA was conducted using a standard methodology in line with the TCFD's guidance. Climate scenarios defined by the Network for Greening the Financial Systems (NGFS) were used to model the potential climate related risks and opportunities that Croda may be exposed to. Selected climate related risks and opportunities identified through our risk assessment process were modelled against the following three scenario categories:

- Net Zero 2050: Orderly (+1.5°C) – early, ambitious action to a net zero CO_2 emissions economy;
- Divergent Net Zero: Disorderly (+2°C) – action that is late, disruptive, sudden and / or unanticipated;
- Current Policies: Hot house world (+3°C) – limited action leads to a hot house world with significant global warming and, as a result, strongly increased exposure to physical risks.

We considered the impact over six, five year time periods to 2050, which extends significantly beyond our strategic planning horizon but is in line with our commitment to be net zero by 2050. For each transitional risk we also considered the impact under the assumption that Croda continues to operate as today (business as usual) and secondly that currently planned mitigating actions to meet Science Based Targets are successfully implemented.

Scenario data from the NGFS and Orbitas Finance, in conjunction with Croda's financial and process data, were used to forecast and quantify the potential levels of climate related financial risk in line with Croda's risk matrix.

Conclusions

Our analysis shows that although the scenarios present financial risks to Croda, these could be managed by currently planned mitigating actions meaning that we would not have to materially change our business model. Of the risks assessed the potential cost impact of carbon taxation across the two transitional risks is the most notable, which will mitigated by implementing our planned emissions reduction programme, described in more detail on page 39.

The transition to 100% RSPO-certified palm derivatives – mitigating transitional and physical climate-related risks

Our sustainable sourcing activities and future strategy will play a large part in mitigating both physical and transitional climate-related risks associated with our raw materials. Since 2012 we have supported the transition to RSPO-certified sustainable palm, with 85% of our purchased palm derivatives RSPO-certified by the end of 2021.

RSPO-certified palm oil cultivation leads to increased yields due to more efficient farming practices, increasing availability of palm and palm kernel oil without further deforestation. Being a leading voice in industry and working with coalitions such as ASD to drive further industry transition to RSPO helps to mitigate the risks associated with increased pricing due to lack of availability.

A peer reviewed LCA study[1] has demonstrated the measurable carbon footprint reduction associated with switching to RSPO-certified palm derivatives.

This is contributing to progress against our science-based target as well as mitigating the risk and impact of any potential carbon taxation associated with our product carbon footprints, for both ourselves and our customers.

1. Schmidt J and De Rosa M (2019). Comparative LCA of RSPO-certified and non-certified palm oil – Executive Summary. 2.-0 LCA consultants: https://lca-net.com/clubs/palm-oil/

Since 2018, our transition to RSPO certified ingredients has led to a 23,949 tonnesCO_2e reduction in our scope 3 purchased goods and services category.

Transitional risks

Risk	*Modelling assumptions*	*Summary of findings*
Carbon pricing on direct emissions	Rising carbon taxes may impact profits through increased direct costs (tax on direct emissions from operations). Key markets may develop and implement regional policies such as the EU carbon border tax to prevent carbon leakage. Using Croda revenue and emissions projections, the potential cost impact of increased carbon prices associated with Croda direct emissions was calculated. The cost was modelled across the future climate related scenarios using carbon price models at a global level from the NGFS database.	In the Current Policies scenario, the additional cost of carbon taxes increase is limited, resulting in a minor level of financial risk to the business out to 2045, when the risk level increases to low. In both the Net Zero 2050 and the Divergent Net Zero scenarios the additional costs due to higher levels of carbon taxation are forecast to expose Croda to high levels of financial risk beyond 2030 assuming a business-as-usual emissions trajectory, which is mitigated to moderate levels when following the planned emissions reduction trajectory in line with Croda's current Science Based Targets.
Cost of natural gas	Future costs of natural gas may impact profits through increased direct costs. Future natural gas prices differ in future climate scenarios but all result in an increase in unit price, likely driven by carbon taxation. Using Croda revenue and natural gas usage projections this scenario assessed the possible cost to Croda of increased natural gas prices, which has been modelled across the future climate related scenarios using natural gas price models at a global level from the NGFS database.	In a business-as-usual energy usage trajectory the Current Policies scenario saw the lowest levels of financial risk, beginning with a moderate level and reaching high risk levels by 2040. In both the Net Zero 2050 and the Divergent Net Zero scenarios the additional costs due to natural gas price increases are expected to expose Croda to high levels of financial risk from 2030 onwards. This is mitigated by implementing Croda's current decarbonisation strategy resulting in reduced usage of natural gas.

Physical risks

Risk	*Modelling assumptions*	*Summary of findings*
Natural raw material pricing	Potential changes in mean global temperatures are likely to affect the location, yield and type of crops grown around the world, with resulting impact on raw material availability and cost. In 2020 palm oil derivatives formed a significant volume of our raw materials and this trend is expected to continue. As such, the future change in the price of palm derivatives will likely have a direct effect on the cost of sale of palm-based products. The potential changes in the cost of sales that Croda may be exposed to has been modelled using the future percentage increase of palm oil prices (Orbitas – Climate Transition Risk Analyst Brief: Indonesian Palm Oil) against the total volumes and price of palm derivatives purchased by Croda in 2021.	The cost of palm is forecast to expose Croda to varying levels of risk across two different climate related scenarios for which clear models are available. In the Current Policies scenario, the cost of palm oil increase is limited, resulting in a low level of financial risk to the business out to 2035 at which point the cost of palm is forecast to drop below the 2020 baseline cost resulting in a cost saving opportunity for the business, driven by continual efficiency improvement in farming technologies (partially supported by Croda innovation) driving prices down. In a Net Zero 2050 scenario a predicted increase in the cost of palm oil (driven by increasing demand for palm oil as an alternative to fossil based oils for fuel) is expected to drive moderate and high levels of financial risk by 2045. Our focus on high value niches and differentiated products with unique characteristics helps to mitigate this risk by enabling us to pass on raw material cost increases to our customers.
Labour productivity	As global mean temperature increases, heat stress within the work force is also forecasted to increase. Heat stress can impact labour productivity due to the reduced capacity of the human body to perform physical labour. To maintain forecast levels of production across the business, Croda may have to hire more staff, increasing our overall staff costs. Staff costs were modelled using Croda staff costs, production volumes and expected annual growth rate in conjunction with NGFS labour productivity due to heat stress data.	In all three future climate scenarios there are only minor or low levels of financial risk to the business for all time periods considered.

Measuring our progress

Our strategy is to combine sustainability and innovation to deliver growth. We measure our progress against each of these priorities through a range of KPIs.

Sustainability
+ Innovation
= Growth

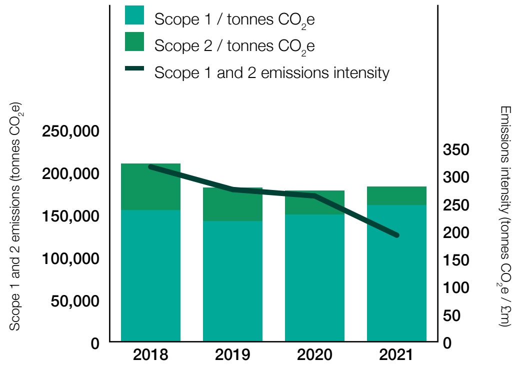
Sustainability

Scope 1 & 2 emissions and intensity* R

Definition:
Our operational emissions (associated with burning fuels onsite and purchased electricity), both in absolute terms and as emissions intensity. Our chosen measure of emissions intensity divides our GHG emissions (market-based scope 2 emissions) by value added, a measure of our business activity*.

Target:
By 2030, we will have achieved our Science Based Target, reducing emissions in line with limiting global warming to no more than 1.5°C above pre-industrial levels.

Performance:
Since 2018 our scope 1 & 2 emissions have reduced by 12.7%, in line with the absolute emissions reduction pathway required to achieve our verified Science Based Target. This has been driven by a 60% reduction in scope 2 emissions following a switch to renewable electricity at our manufacturing sites. Since 2018 our emissions intensity has improved by 39% and we are successfully disconnecting growth from emissions. For more detail see Sustainability on page 39.



Land area saved (hectares) R

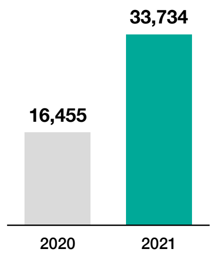
Definition:
Land area saved through the application of our crop protection and seed enhancement technologies, using 2019 as our baseline year.

Target:
Throughout this decade, the land saved through the application of our technologies will exceed any increase in land used to grow our raw materials by at least a factor of two, and by 2030 we will save a minimum 200,000 hectares per year more than in 2019.

Performance:
In 2021 the use of our agricultural ingredients and new technologies saved 33,734 hectares of land compared to our 2019 baseline. This puts us on track to achieve our 2030 target that the land we save outpaces the land we use as our business grows by a factor of at least two. Read more in our Sustainability section on page 33.

Land area saved

33,734
hectares of land saved over the 2019 baseline



Health and wellbeing**

Definition:
The number of pipeline vaccines that we are contributing to that combat the World Health Organisation's (WHO) 24 priority diseases.

Target:
By the end of 2024, our technology will be contributing to at least 10 clinical phase III trials across at least 25% of the WHO-listed pipeline vaccines.

Performance:
We have continued to increase engagement with teams researching WHO-listed pipeline vaccines and are now supporting 79 projects (2020: 32) contributing to tackling 15 of the 24 priority diseases.

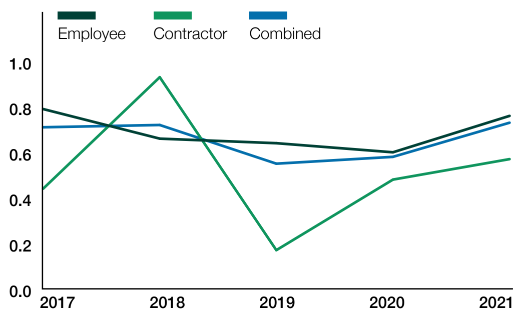
15/24
Our smart science is contributing to vaccine projects combatting 15 of the WHO's 24 priority diseases

Total Recordable Injury Rate^

Definition:
The number of incidents per 200,000 hours worked where a person has sustained an injury, including all lost time, restricted work and medical treatment cases.

Target:
Achieve TRIR of 0.3 by the end of 2024, with an interim target of 0.6 for 2022.

Performance:
The headline TRIR increased from 0.58 to 0.73^ in 2021. Injury rates at the sites of recently acquired businesses are, on average, higher than established Croda sites and while they are reducing as integration progresses, their inclusion has driven an increase in the overall Group TRIR. There was also a small increase driven by existing Croda sites as a return to more normal working patterns has seen increased recordable injuries. To read about our performance and safety initiatives see page 36 of our 2021 Sustainability Report.



* See page 39 for our definition of value added and further detail on our emissions intensity.
** Our People Positive strategy encompasses various targets and cannot be represented by a single KPI. In 2022 we plan to implement an employee engagement KPI for reporting. We have also introduced a specific gender balance target to our Remuneration Policy for 2022.
^ Both the 2021 and 2020 TRIR include businesses acquired but exclude workplace related COVID-19 cases.

Key:

R **Remuneration:**
KPIs that form part of our Remuneration Policy. See page 88.

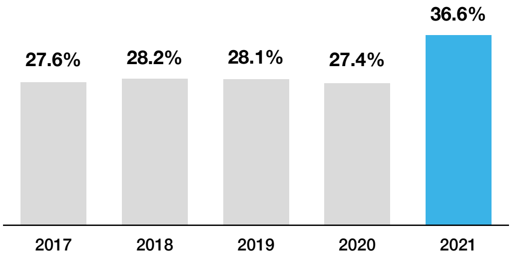
Innovation

New and Protected Products (NPP) sales % R

Definition:
Proportion of sales from NPP (in constant currency). NPP products are sales protected by virtue of being either newly launched, protected by intellectual property or by unique quality characteristics.

Target:
NPP sales to grow ahead of sales growth.

Performance:
NPP sales increased from 27.4% in 2020 to 28.0% on an organic basis, or to 36.6%, including the impact of the Iberchem and Avanti acquisitions. This reflects strong sales of lipid systems and a high NPP percentage at Iberchem where a large proportion of sales are of new products due to ongoing innovation within that business model. Read more about innovation in Identifying unmet needs on page 4.



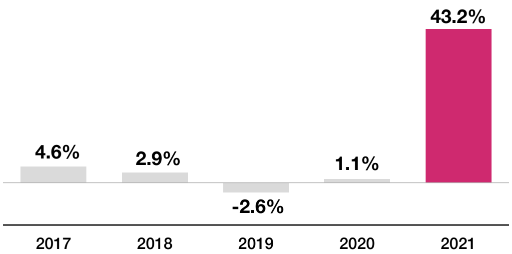
Growth

Sales growth (%)

Definition:
Total sales growth measured at constant currency.

Target:
Mid-single digit % growth in Consumer Care. High-single digit % growth in Life Sciences. Excluding raw material price recovery.

Performance:
Sales growth in 2021 was 43.2%, driven by an excellent performance across all sectors including 52.9% growth in Consumer Care and 53.5% growth in Life Sciences. Acquisitions contributed 16.9% to sales growth, but excluding acquisitions underlying sales growth was 26.3%.

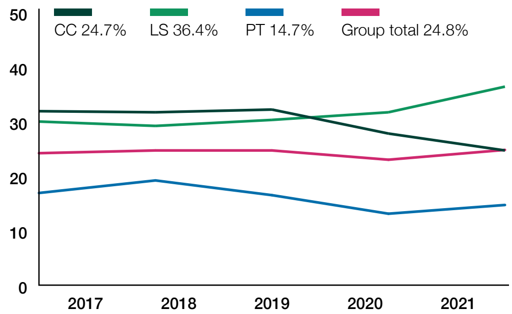


Return on sales (ROS) (%) R

Definition:
Adjusted operating profit as a percentage of sales.

Target:
Improve ROS in Consumer Care. ROS similar to current levels in Life Sciences.

Performance:
Group ROS increased by 180 basis points to 24.8%. Consumer Care ROS was 24.7% (2020: 27.8%) reflecting the dilution effect from F&F, which operates at structurally lower margins than Personal Care. Life Sciences ROS was 36.4% (2020: 31.7%) reflecting strong growth in higher-value patient health technologies.

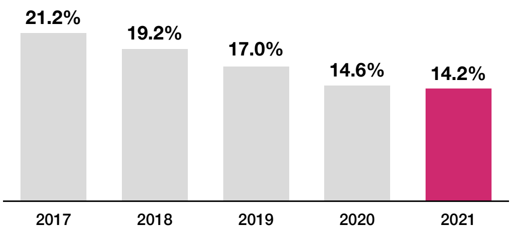


Return on invested capital (ROIC) (%)

Definition:
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.

Target:
ROIC of two to three times cost of capital.

Performance:
The post-tax return on invested capital ('ROIC') was broadly flat at 14.2% (2020: 14.6%). Despite a significant increase in average invested capital due to the annualisation of 2020 acquisition activity, the growth in adjusted operating profit net of tax resulting from these investments, together with underlying growth, broadly offset this. ROIC continues to be more than twice the Group's cost of capital.

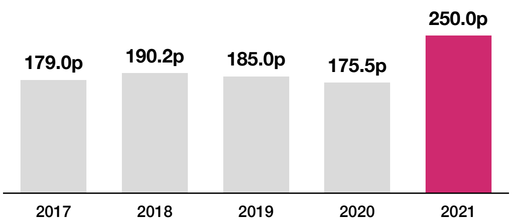


Adjusted basic earnings per share (EPS) R

Definition:
Adjusted profit after tax divided by the average number of shares in issue.

Target:
At least mid-single digit % EPS growth per annum.

Performance:
Adjusted earnings per share increased by 42.5% to 250.0p. This growth was driven by excellent profit growth and a marginally lower tax rate of 21.2% (2020: 24.1%) offset by an increased number of shares in issue following the equity placing in 2020.



To read more about our financial performance see Finance review
P46

We expect to continue with the current accelerated capital reinvestment and acquisition programmes over the next three years, given the strong demand environment and range of growth and technology opportunities in Consumer Care and Life Sciences.

Jez Maiden
Group Finance Director

Record profit and margin delivered

"Sales performance was excellent across all sectors, augmented by raw material cost recovery."

Adverse impact from currency translation

The average Sterling exchange rates against the Group's key currencies strengthened during 2021 to US$1.375 (2020: US$1.285) and €1.164 (2020: €1.125). As a result, currency translation reduced reported currency sales by £101.6m and adjusted operating profit by £24.8m. Transactional currency impact is correlated with translation, given that the UK is a meaningful centre of production for the Group, with the strength of Sterling having an adverse impact on margins.

Strong sales from organic growth and acquisition

Sales grew by 35.9% to £1,889.6m (2020: £1,390.3m), comprising underlying growth of 26.3% and a first-year acquisition benefit of 16.9%, partly offset by adverse currency translation of 7.3%. Volume was 8.9% higher than prior year and sales price/mix rose by 17.4%, reflecting successful recovery of raw material cost increases, together with a better product mix.

	Full year ended 31 December						
Sales	**2021 £m**	Price/mix	Volume	Acquisition	Currency	Change	2020 Restated £m
Consumer Care	**763.0**	12.8%	5.2%	34.9%	(8.3)%	44.6%	527.8
Life Sciences	**572.3**	34.9%	5.5%	13.1%	(7.7)%	45.8%	392.5
Performance Technologies	**439.5**	11.0%	12.5%	–	(5.9)%	17.6%	373.6
Industrial Chemicals	**114.8**	14.6%	10.3%	–	(5.8)%	19.1%	96.4
Group	**1,889.6**	17.4%	8.9%	16.9%	(7.3)%	35.9%	1,390.3

Sales performance was excellent across all sectors, augmented by raw material cost recovery. Consumer Care sales increased by 44.6%, supported by a return to strong volume growth. Life Sciences sales increased by 45.8%, with growth across all markets and sales of approximately US$200m from the lipid systems platform primarily to our principal vaccine customers. With volume growth in industrial end markets, Performance Technologies sales increased by 17.6%, whilst a recovery in commodity prices saw Industrial Chemicals sales 19.1% higher. Overall, year-on-year growth was slightly lower in the second half year, due to a softer first half comparator when COVID-19 had its biggest impact in 2020.

2021 sales growth	First half %	Second half %	Full year %
Consumer Care	**46.2**	**43.1**	**44.6**
Life Sciences	**61.5**	**32.5**	**45.8**
Performance Technologies	**14.7**	**20.8**	**17.6**
Industrial Chemicals	**12.6**	**25.3**	**19.1**
Group	**38.8**	**33.2**	**35.9**

Note: Sector results for full year 2020 have been restated to reflect a change to the Group's reporting structure.

Underlying sales were 17.7% ahead of 2019 (excluding sales of lipid systems introduced since 2019, to provide a better basis of comparison), demonstrating significant growth against pre-pandemic levels. Consumer Care, Life Sciences and Performance Technologies were all up double-digit percentage on 2019.

Underlying sales growth (excluding lipid systems)	% change 2021 vs. 2019
Consumer Care	**17.3**
Life Sciences	**23.6**
Performance Technologies	**15.9**
Industrial Chemicals	**8.0**
Group	**17.7**

Record profit and margin delivered

2021 saw the most significant upward movement in raw material prices for over a decade, with our average basket of raw materials in the underlying business up 17% across the year. Croda's operating model is to recover such increases as they occur and this has been delivered overall, despite a small lag in recovery in F&F, where the business model differs from Croda's traditional model. Alongside a strengthening product mix as we grew in higher value niches, this resulted in an improvement of 17% in sales price/mix.

2021 also saw significant volume recovery globally, up 9% in underlying terms, as consumer demand returned as COVID impacts eased and customers restocked. Combined with global supply chain disruption affecting many industries, including a shortage of freight containers and delays accessing ports, together with new UK/European trading procedures post-Brexit and higher COVID-related absenteeism, maintaining customer service came under some stress and we increased tactical inventory volume to alleviate delays and protect customer supply. With volume growth moderating towards the end of the year, service levels improved. Our Brexit preparation plans were implemented smoothly and successfully.

2021 included a significantly higher remuneration incentive charge than the prior year, reflecting bonus and share-based payment costs due to the enhanced profit and share price performance; this reduced year-on-year margin by two percentage points. Despite these headwinds, Croda achieved a record profit and return on sales in 2021.

	2021			2020		
	IFRS £m	**Adjustments £m**	**Adjusted £m**	IFRS £m	Adjustments £m	Adjusted £m
Sales	**1,889.6**	**–**	**1,889.6**	1,390.3	–	1,390.3
Cost of sales	**(950.7)**	**–**	**(950.7)**	(758.2)	–	(758.2)
Gross profit	**938.9**	**–**	**938.9**	632.1	–	632.1
Operating costs	**(500.7)**	**(30.4)**	**(470.3)**	(342.1)	(29.6)	(312.5)
Operating profit	**438.2**	**(30.4)**	**468.6**	290.0	(29.6)	319.6
Net interest charge	**(26.7)**	**(3.3)**	**(23.4)**	(20.5)	(1.5)	(19.0)
Profit before tax	**411.5**	**(33.7)**	**445.2**	269.5	(31.1)	300.6
Tax	**(88.7)**	**5.7**	**(94.4)**	(67.9)	4.5	(72.4)
Profit after tax	**322.8**	**(28.0)**	**350.8**	201.6	(26.6)	228.2

IFRS operating profit increased by 51.1% to £438.2m (2020: £290.0m).

The charge for adjusting items before tax was £33.7m (2020: £31.1m). In common with many companies, Croda identifies adjusting items as amortisation of intangible assets arising on acquisition, together with exceptional items, which require separate disclosure by virtue of their size or incidence. The charge for amortisation of intangible assets before tax increased to £34.3m (2020: £13.6m), reflecting the impact of recent acquisitions. The net credit on exceptional items before tax was £0.6m (2020 charge: £17.5m), comprising a gain on pensions of £11.2m (arising from transfer of the Dutch scheme to a collective defined contribution arrangement); a gain on contingent consideration of £6.2m related to previous acquisitions; a charge for business acquisition and disposal costs of £13.5m, principally relating to the sale of the majority of PTIC; and a charge for the unwind of the discount on contingent consideration of £3.3m. Excluding these adjusting items, adjusted operating profit increased by 46.6% to £468.6m (2020: £319.6m), reflecting higher sales and margin. Return on sales improved to 24.8% (2020: 23.0%).

With the adjusted net interest charge increasing to £23.4m (2020: £19.0m), including the write-off of a loan to a technology investment, adjusted profit before tax increased by 48.1% to £445.2m (2020: £300.6m). IFRS profit before tax increased by 52.7% to £411.5m (2020: £269.5m).

The effective tax rate on adjusted profit reduced to 21.2% (2020: 24.1%). This benefitted from a one-off settlement of a previous uncertain tax position; we expect the future tax rate to be around 25%. The impact of the divestment of the majority of PTIC on the future tax rate is expected to be immaterial. There were no other significant adjustments between the Group's expected and reported tax charge based on its accounting profit. With an increase in shares in issue following the equity placing to acquire Iberchem in late 2020, IFRS basic earnings per share (EPS) were 230.0p (2020: 155.1p) and adjusted basic EPS increased by 42.5% to 250.0p (2020: 175.5p).

Profit performance was strong across all sectors, led by Life Sciences where adjusted operating profit was up 67.5%, reflecting sales growth and an improvement in product mix towards higher value add niches. Consumer Care adjusted operating profit rose 28.7%, strengthening in the second half year with continued growth and mix improvement in its Personal Care business. Performance Technologies benefitted from the recovery in demand, with higher volume positively impacting operating leverage, resulting in adjusted operating profit 31.9% higher. Industrial Chemicals enjoyed significantly better profit due to improved commodity pricing.

Operating profit	2021 IFRS £m	2021 Adjustments £m	2021 Adjusted £m	2020 restated IFRS £m	2020 restated Adjustments £m	2020 restated Adjusted £m
Consumer Care	**168.0**	**(20.5)**	**188.5**	133.0	(13.5)	146.5
Life Sciences	**201.0**	**(7.5)**	**208.5**	112.3	(12.2)	124.5
Performance Technologies	**62.7**	**(1.8)**	**64.5**	45.3	(3.6)	48.9
Industrial Chemicals	**6.5**	**(0.6)**	**7.1**	(0.6)	(0.3)	(0.3)
Group	**438.2**	**(30.4)**	**468.6**	290.0	(29.6)	319.6

Underlying growth across the sectors added £116.0m to adjusted operating profit, acquisitions within the first year of ownership contributed £57.8m and currency represented a £24.8m headwind.

	Full year ended 31 December					
Adjusted profit	**2021 £m**	Underlying growth £m	Acquisition impact £m	Currency impact £m	2020 restated £m	Change
Consumer Care	**188.5**	27.8	26.0	(11.8)	146.5	28.7%
Life Sciences	**208.5**	62.5	31.8	(10.3)	124.5	67.5%
Performance Technologies	**64.5**	17.9	–	(2.3)	48.9	31.9%
Industrial Chemicals	**7.1**	7.8	–	(0.4)	(0.3)	–
Operating profit	**468.6**	116.0	57.8	(24.8)	319.6	46.6%
Net interest	**(23.4)**				(19.0)	23.2%
Profit before tax	**445.2**				300.6	48.1%

Impact of the divestment of the majority of PTIC

On 22 December 2021, the Group announced an agreement to divest the majority of the PTIC business and is currently working with the acquirer on the process to separate the acquired activities from the Group. With completion of the divestment expected in summer 2022, this transaction had no impact on the Group's reported results for 2021, except for costs incurred reported as an exceptional item. In these 2021 results, PTIC revenue totalled £554m (2020: £470m) and adjusted operating profit was £72m (2020: £49m). Taking account of the value to be retained by Croda under future supply agreements for products to be manufactured at Croda sites and supplied to the acquirer, together with dis-synergy costs remaining with Croda which were previously allocated to the divested business, the estimated impact of the divestment on Croda's reported 2021 results, had it occurred at the start of 2021, would have been to reduce revenue by £361m (2020: £298m) and adjusted operating profit by £59m (2020: £36m).

Lower free cash flow reflecting higher investment and demand growth

Free cash flow reduced to £153.6m (2020: £176.9m) as a result of higher working capital and increased capital investment. Working capital rose by just over £100m due to increased raw material costs and selling prices, higher sales volumes and tactical increases in inventory to mitigate global distribution challenges. The impact of higher pricing and sales volume (at constant working days cover) accounted for approximately £69m of the increase with the balance reflecting tactical increases.

	Full year ended 31 December	
Cash flow	**2021 £m**	2020 £m
Adjusted operating profit	**468.6**	319.6
Depreciation and amortisation	**79.0**	68.2
EBITDA	**547.6**	387.8
Working capital	**(102.5)**	(2.3)
Net capital expenditure	**(158.5)**	(121.0)
Payment of lease liabilities	**(14.4)**	(7.6)
Non-cash pension expense	**11.2**	7.7
Interest & tax	**(129.8)**	(87.7)
Free cash flow	**153.6**	176.9
Dividends	**(132.5)**	(115.9)
Issue of new equity	**–**	615.5
Acquisitions	**(58.8)**	(869.7)
Other cash movements	**19.0**	(26.6)
Net cash flow	**(18.7)**	(219.8)
Net movement in borrowings	**37.6**	237.3
Net movement in cash and cash equivalents	**18.9**	17.5

Capital investment increased to £158.5m (2020: £121.0m), reflecting the start of a programme to reinvest proceeds from the divestment of the majority of PTIC to unlock growth opportunities in Consumer Care and Life Sciences. This is creating new technology platforms and expanding existing capacity to drive superior future growth. This organic expansion is supported by selected inorganic acquisition opportunities, with 2021 seeing £58.8m invested in new platforms, with Parfex in fine fragrances and Alban Muller in natural Beauty Actives. Together, this organic and inorganic investment reflects elements 1 and 3 of the Group's capital allocation policy, to:

1. **Reinvest for growth** – invest in organic capital expenditure to drive shareholder value creation through new capacity, product innovation and expansion in attractive geographic markets to drive sales and profit growth;
2. **Provide regular returns to shareholders** – pay a regular dividend to shareholders, representing 40 to 50% of adjusted earnings over the business cycle. The full year dividend has been raised by 10% to 100.0p (2020: 91.0p), being 40% of adjusted earnings;
3. **Acquire disruptive technologies** – to supplement organic growth, target a number of exciting technology acquisitions in existing and adjacent markets, strengthening Consumer Care and expanding Life Sciences; and

4. **Maintain an appropriate balance sheet and return excess capital** – maintain an appropriate balance sheet to meet future investment and trading requirements, targeting a leverage ratio of 1 to 2x over the medium-term cycle. We consider returning excess capital to shareholders when leverage falls below our target range and sufficient capital is available to meet our investment opportunities. At 31 December 2021, the leverage ratio was 1.4x (31 December 2020: 1.8x) and is expected to fall below 1x on completion of the disposal of the majority of PTIC.

We expect to continue with the current accelerated capital reinvestment and acquisition programmes over the next three years, given the strong demand environment and range of growth and technology opportunities in Consumer Care and Life Sciences.

The post-tax ROIC was broadly flat at 14.2% (2020: 14.6%). Despite a significant increase in average invested capital due to the annualisation of 2020 acquisition activity, the growth in adjusted operating profit net of tax resulting from these investments, together with underlying growth, broadly offset this. ROIC continues to be more than twice the Group's cost of capital.

Closing net debt was £823.2m (31 December 2020: £800.5m). The Group has a strong balance sheet with its material debt maturities falling due between 2023 and 2030, and the primary bank revolving credit facility extended during the year to 2026. As at 31 December 2021, the Group had committed funding in place of £1,225.8m, undrawn committed facilities of £334.4m and £112.8m in cash.

As part of the annual review of going concern, the Group conducts a series of scenario tests for different economic environments. In 2021, Group sales and profit performed well ahead of the base case scenario evaluated in February 2021, whilst cash generation was broadly similar.

Retirement benefits

The post-tax asset on retirement benefit plans at 31 December 2021, measured on an accounting valuation basis under IAS 19, improved to £5.8m (31 December 2020: £25.3m liability), primarily due to higher discount rates and the transfer of the Dutch scheme to a collective defined contribution arrangement. This new arrangement is accounted for as a defined contribution scheme as the Group pays a fixed rate of contributions and members are paid pensions with variable increases. 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. The Group has discussed with the Trustee the impact on the scheme of the planned divestment of the majority of PTIC and no changes to funding are anticipated as a result.

Alternative Performance Measures (APMs)

We use a number of APMs to assist in presenting information in this statement in an easily analysable and comparable form. We use such measures consistently at the half year and full year, and reconcile them as appropriate. 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 and include the impact of acquisitions. 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 Finance Review. The APMs are calculated as follows:
  - For constant currency profit, translation is performed using the entity reporting currency;
  - For constant currency sales, local currency sales are translated into the most relevant functional currency of the destination country of sale (for example, sales in Latin America are primarily made in US Dollars, which is therefore used as the functional currency). Sales in functional currency are then translated into Sterling using the prior year's average rates for the corresponding period;
- **Underlying results:** these reflect constant currency values adjusted to exclude acquisitions and disposals in the first year of impact. They are used by management to measure the performance of each sector before the benefit of acquisitions or the impact of divestments are included, in order to assess the organic performance of the sector, thereby providing a consistent basis on which to make year-on-year comparison. They are seen as similarly useful to shareholders in assessing the performance of the business. Underlying results are reconciled to reported results in the Finance review;
- **Adjusted results:** these are stated before exceptional items and amortisation of intangible assets arising on acquisition, and tax thereon. The Board believes that the adjusted presentation (and the columnar format adopted for the Group income statement) assists shareholders by providing a meaningful basis upon which to analyse business performance and make year-on-year comparisons. The same measures are used by management for planning, budgeting and reporting purposes and for the internal assessment of operating performance across the Group. The adjusted presentation is adopted on a consistent basis for each half year and full year results;
- **Return on sales:** this is adjusted operating profit divided by sales, at reported currency. 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. The Board believes that ROIC is a key measure of efficient capital allocation, in line with its policy set out in the Finance Review, 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. 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.

Managing risk

Our risk framework enables the business to protect and create value, helping us to identify opportunities and minimise threats to the delivery of our strategic and operational objectives.

Risk strategy and governance

Our Board owns and oversees our risk management programme, with overall responsibility for ensuring that our risks are aligned with our goals and strategic objectives. The Audit Committee assists the Board in monitoring the effectiveness of our risk management and internal control policies, procedures and systems (page 81).

Risk monitoring and reporting

Global visibility of all risks is delivered through our global risk reporting dashboard, updated daily from our risk and control system (the Digital Hive) which provides a platform to understand and manage risks and enables risk comparison across regions, operations and sectors. Using our global risk management framework (page 52), similar risks are considered together by generic risk area, sub-categories and categories, giving the Board and management visibility of the aggregated risks on a Group-wide basis. Each of our strategic and operational risks is owned by an Executive member.

Risk appetite

Risk appetite statements are defined for each subcategory of risks and each generic risk has a defined risk appetite, visible to all risk owners, which is owned and reviewed by an Executive member. Risk appetite statements are reviewed annually by the Executive and the Board (page 66) in order to guide the actions management take in executing our strategy.

Key risk indicators

We set targets to help monitor performance in mitigating our risks. These targets also support decision making by providing management with information about Executive expectations and are monitored and reviewed by the risk related steering groups (page 52).

Risk culture

We use our global risk management framework (page 52) to drive an integrated and owned approach to risk management through the culture of the entire organisation.

Risk oversight

The Board carried out a robust assessment of emerging and principal risks facing the Group at its meeting in July (page 66), including those that would threaten its business model, future performance, solvency or liquidity. It also received quarterly assurance updates from the Chair of the Risk Management Committee.

Risk management

Responsibility for risk management is embedded throughout our organisation. Our first line of defence, our employees, have a responsibility to manage day-to-day risk in their own areas guided by Group policies, procedures and control frameworks. Local management, and ultimately the Executive, ensure that risks are managed, maintained, reviewed and actioned according to these frameworks.

The second line of defence is provided by management team review of each risk register, culminating in review by the Risk Management Committee (page 52), which meets quarterly to challenge and monitor current risks and receive presentations from key risk owners. Insight on external trends and on internal emerging risks (from review of the bottom-up risk registers) is provided by the risk team and discussed by the Committee.

The third line of defence is assurance over the effectiveness of mitigating controls, which is provided through internal audits in addition to reports from external assurance providers. These reports are reviewed by three Executive Committees (page 52) and are monitored and challenged by the Audit Committee (page 81) and the Board.

We have a Global Crisis Management plan in place to manage significant risk events, owned by the Executive, which is tested at least annually based on key risk scenarios.

Our principal risks

Our risk heat map (page 52) identifies principal pre-mitigation risks and reflects a summary of local risks identified in the risk framework. They are those that we consider most impact our business model (page 16) and the delivery of our long-term strategic objectives (page 20). They are explained in further detail in the table on pages 53 to 55. These risks also form the basis of scenario testing for the assessment of long-term viability of the Company on page 56.

Changes to our gross risk environment in 2021

Movements on the risk heat map on page 52 reflect changes to the long-term risk environment that we are facing and how these risks have changed in the year. In 2021 we have added one new principal risk, whilst three risks have moved out of the principal list.

Business system security risks have increased during 2021 as a result of increasing cyber threats globally, whilst other principal risks have remained at the same level as 2020.

All risks continue to be monitored by the Risk Management Committee for significant change and if the impact or likelihood increases will be identified as principal risks in future.

New principal risks in 2021

In the light of significant business change programmes being driven by our strategy (page 20) we have added a standalone principal risk relating to Management of Business Change which is described in detail, together with our mitigation approach, on page 54.

Risks moving out of principal risks in 2021

Management's view is that the three risks which are no longer considered to be principal are all effectively managed. They are also slower velocity risks, giving us time to take mitigating actions to address any increased levels of risk. These risks are:

- Supplier and raw material security: The last two years have seen a period of significant disruption to global trade (see case study below). Throughout this period our procurement teams have worked with suppliers to ensure that raw materials continue to be available and production has remained uninterrupted. Our ability to secure supply in such a challenging period enables us to reduce the impact of supplier and raw material security which results in the risk falling outside our definition of a principal risk.
- Product stewardship and chemical regulatory compliance: We consider this to be a risk with well established operational process, a dedicated specialist team and no recent issues. In 2021 we increased the size of the team to address complexity in this area and to support further integration across the business. This enabled us to reduce the likelihood of the risk, which results in this risk falling outside our definition of a principal risk.
- Ineffective management of pension fund: In 2021 we worked with the UK scheme trustee to further reduce the likelihood of investment and funding risks. Given the Group's balance sheet strength, the impact of any significant increased funding requirements impacting Croda's balance sheet is assessed as reduced since 2020. The combination of reduced risk impact and likelihood results in the risk falling outside our definition of a principal risk.

Supply chain management

The continued short-term impact of COVID-19 and Brexit has seen disruption of our supply chain in 2021. This has the potential to impact both our raw material supply and the availability of freight to deliver finished product to our customers. We monitor delivery metrics closely through our Safety, Health, Environment and Quality (SHEQ) steering committee and at our monthly regional leadership team meetings. Supply chain management has been challenging, but thanks to the excellent work of our teams in customer service, shipping and sales we have supplied greater volumes to our customers than in previous years, demonstrating the resilience of our supply chain. In addition, our flexible production sites have implemented rapid debottlenecking and amended plant scheduling to accommodate changes to material availability and increased demand. The main short-term challenges we had to address in 2021 have been as follows:

- Brexit import and export paperwork for particular raw materials, leading to a backlog of material being held in port
- Shortage of hauliers, particularly in the UK, Spain and USA
- Shortage of deep sea containers, particularly for shipping from East to West, with a consequent increase in prices of these containers
- COVID-19 related absenteeism impacting Croda and third-party logistics provider teams

Risk appetite

Our risk appetite is the level of risk that Croda is willing to accept in the pursuit of a specific objective or strategy. We have defined our risk appetite in a number of areas in order to manage and monitor our risk exposure. Assessing risks against our risk appetite also provides the opportunity to identify areas where we may not be taking enough risk. Our risk appetite statements are compiled based on our Company values, strategy, and capacity to absorb risk in certain areas. We have risk appetite statements in place for each of our risk sub-categories, each being owned by a member of the Executive. On an annual basis the risk appetites are reviewed by the Executive and the Board (page 66) and updated to ensure they remain relevant. We use our risk appetites as a starting point to review and challenge the level of risk that we are taking for each of our key risks, to identify areas where additional control may be needed, or where the level of control may be too onerous.

Our risk framework

What we monitor

Executive risk register

Summary of the principal risks facing us prepared by combining risks identified through the local bottom-up registers with Group-level risks identified and owned by the Executive Committee

Our risk landscape

Current risks
Risks we are managing now that could stop us achieving our strategic objectives

Emerging risks
Risks with a future impact from external or internal opportunities or threats. These can be slow moving, as well as rapid velocity

What we assess

Risk ownership: each risk has a named owner

Likelihood and impact: globally applied 6x6 scoring scale

Gross risk: before mitigating controls

Mitigating controls: subject to internal audit review and monitoring

Net risk: after mitigating controls are applied

Risk appetite: defined at generic risk and subcategory level and transparent through our risk dashboard

Actions: for further mitigation if required

Risk categories we assess

Six categories, 17 subcategories, over 50 generic risks, one framework:

- Strategic
- People and culture
- Process
- External environment
- Business systems and Security
- Financial

Our bottom-up registers

The core of our risk assessment. Owned by market sectors, regions, manufacturing sites and functions, they identify local risks and mitigating controls arising from day-to-day operations in over 30 risk registers globally

How we monitor

Board

Responsible for the risk framework and definition of risk appetite. Reviews key risks with an opportunity for in-depth discussion of specific key risks and mitigating controls annually. Approves the viability statement.

P73

Audit Committee

Reviews the effectiveness of the Group risk management process. Reviews assurance over mitigating controls, directing internal audit to undertake assurance reviews for selected key risks. Reviews viability scenario assessments.

P73

Risk Management Committee

Chaired by Jez Maiden.

Meets quarterly to monitor and review risks other than Safety, Health, Environment and Quality (SHEQ), Ethics and Sustainability.

Standing agenda item to monitor business IT systems and cyber risks and currently COVID-19 risk. Covers proactive risk management, risk monitoring and mitigation and internal and external emerging risks, including emerging regulatory requirements.

Receives an in-depth presentation of specific key risks and mitigating controls from risk owners at each meeting.

Considers the results of internal audit work for all risks.

P73

Sustainability Committee

Chaired by Phil Ruxton.

Meets quarterly to oversee the development, measurement and delivery of our sustainability strategy and the significance of climate-related risks and opportunities.

Monitors against stretching targets and agreed KPIs.

P73

Group SHEQ Steering Committee

Chaired by Mark Robinson.

Meets quarterly to review SHEQ risks. Monitors against stretching targets and agreed KPIs. Considers the results of assurance audits over SHEQ controls.

P73

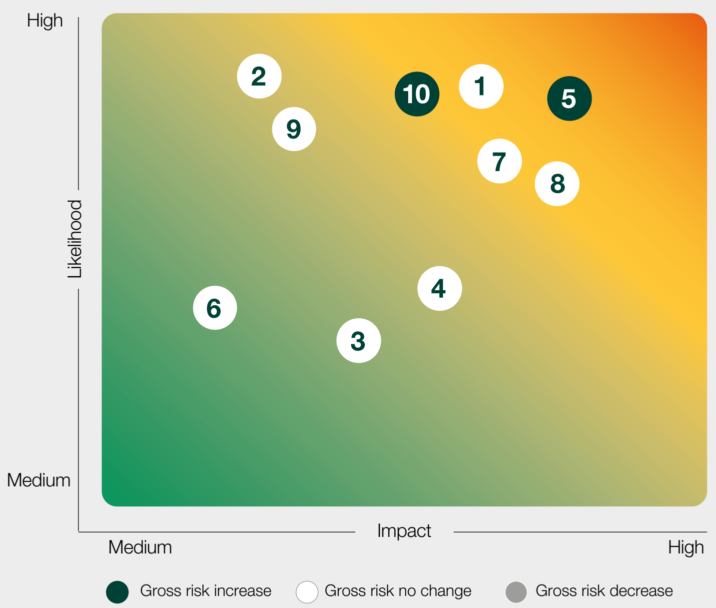
Group Ethics Committee

Chaired by Tom Brophy.

Meets quarterly to review ethics and compliance risks. Monitors against agreed KPIs. Considers the results of assurance audits over Ethics controls.

P73

Risk heat map



Our principal risks are reported gross (before mitigating controls)

Strategic risk

1	Revenue generation
2	Product and technology innovation and protection
3	Digital technology innovation
4	Delivering sustainable solutions — Climate and Land Positive
5	Management of business change

People and culture risk

6	Our people — culture, wellbeing, talent development and retention

Process risk

7	Product quality
8	Loss of significant manufacturing site

External environment risk

9	Ethics and compliance

Business systems risk

10	Security of business information and networks

Key

Link to our strategy (page 20)

- **Sustainability:** align our business with our Purpose and accelerate our customers' transition to sustainable ingredients
- **Innovation:** increase the proportion of NPP that we sell
- **Growth:** consistent top and bottom-line growth

Risk movement

- Risk increase
- No change
- Risk decrease
- V Included in viability statement (see page 57)

Link to our business model (page 16)

- E Engage
- C Create
- M Make
- S Sell

Strategic

Principal risks

1. Revenue generation

President Regional Delivery and Sector Presidents

V E S

Why this matters to us

Our ambition is to deliver consistent top and bottom-line growth, with profit growing ahead of sales, ahead of volume. To grow, we need to innovate and also keep pace with our customers as they serve consumers globally in established markets and higher risk developing markets. Failure to manage these challenges and the consequences of any geopolitical tensions will adversely impact delivery of our growth strategic objective (page 20). Acquisitions of adjacent technologies will dilute growth if they are not effectively integrated.

How we respond

Through our global sector sales, marketing and technology teams, we identify consumer trends and respond swiftly to satisfy customer needs through key technologies. Our direct selling model enables us to get closer to our customers. Our resilient business model (page 16) and continued focus on growing profit ahead of sales ahead of volume mitigates profit impact in difficult trading conditions.

What we have done in 2021

- Delivered growth across all regions and sectors (page 11)
- Continued to strengthen our country selling teams and developed further digital channels through which our customers can engage with us; crucial in maintaining the business pipeline whilst in-person visits have been restricted by COVID-19
- Started integration of Iberchem as part of our Consumer Care sector and provided a stronger footprint in developing markets
- Invested in Iberchem Brazil, one of the largest markets for fragrances globally
- Optimised the opportunities available to us in Health Care vaccination, building our brand and reputation in this area and meeting the urgent needs of the COVID-19 pandemic
- Implemented a global 'voice of the customer' survey to understand what we do well and where we need to improve, to continue to deliver innovative products and excellent service to our customers
- Expanded our reach for high value niche Health Care ingredients globally, building a pipeline of new products
- Acquired Alban Muller and Parfex (page 6)

2. Product and technology innovation and protection

Nick Challoner
Group Chief Scientific Officer

V E C

Why this matters to us

Innovation is the lifeblood of our business (page 4). It plays a critical role across our operations; it differentiates us from the competition, protects sales and improves our margins. Failure to leverage the knowledge of our global innovation teams could lead to a reduction in New and Protected Products ('NPP') and will impact growth and margin.

Failure to protect the intellectual property ('IP') in these products in existing and new markets could undermine our competitive advantage.

How we respond

Our outstanding technical research and development (R&D) teams, based in our customer innovation centres and application laboratories globally, focus innovation on customer and market needs and are embedded across our business. We invest in: R&D, Open Innovation and Smart Partnership programmes, seeking premium niches and disruptive technology acquisitions (page 12). Our specialist IP team protect new products and technologies, defending our IP and challenging third-party IP where appropriate.

What we have done in 2021

- Resourced our long-term innovation platforms, ensuring we enhance the skill levels of experts leading our approach to disruptive technology development
- Commenced a multi-million pound project to introduce artificial intelligence and data mining across our global R&D knowledge base (page 4)
- Scaled our support of manufacturing for lipid delivery systems in both Europe and USA enabling continuing supply to COVID-19 vaccine manufacturers
- Continued to educate our scientists to ensure that we support the principles of green chemistry and sustainable innovation in line with our strategy
- Delivered strong increase in NPP, supported by our Avanti and Iberchem acquisitions (page 45)
- Invested in a new centre for biotech process design and optimisation in the UK (page 12)

3. Digital technology innovation

Jez Maiden
Group Finance Director

V C M S

Why this matters to us

Digital technology is a significant disruptor, rapidly changing markets that we operate in, changing the way we interact with our external partners and each other. New and established customers expect a high level of online service, from researching ingredients to buying, and failure to meet these ahead of competitors will impact growth, hinder R&D knowledge sharing and create inefficient processes.

How we respond

Our functional specialist teams focus on our business model areas of Create, Make and Sell (page 16) and provide global leadership to take advantage of the fast evolving digital world. They deliver an integrated market-facing environment that encompasses everything from product development through artificial intelligence-enabled manufacture, to customer service. Digital pilot projects embedded in the organisation support agile, local trials of innovative ideas, which can grow into global initiatives.

What we have done in 2021

- Create: selected a provider for our global R&D knowledge management system and started the roll out to share global R&D expertise
- Make: developed a series of pilot projects to enhance manufacturing efficiency, including real-time plant monitoring and advanced process control
- Sell: delivered key strategic projects to enhance online presence, including a new suite of websites targeting customers in China, integration of Croda's global Customer Relationship Management system with website enquiries, web improvements to drive greater customer engagement and the introduction of new digital selling tools

4. Delivering sustainable solutions – Climate and Land Positive

Nick Challoner
Group Chief Scientific Officer

V C M

Why this matters to us

We have made a bold Commitment to be Climate and Land Positive by 2030 (page 2), aligning our smart science with United Nations Sustainable Development Goals (SDGs). Sustainability has been a strategic priority for Croda for over a decade and we are committed to delivering improvements in line with the objective to limit global temperature rises to no more than 1.5°C above pre-industrial levels. Climate change, biodiversity loss and rising inequality are changing consumer demands, making sustainability as important to consumer choice as price.

Failure to remain ahead of our competitors and to deliver on our stretching 2030 targets will damage our reputation and compromise growth.

How we respond

Our sustainability team, led by our Chief Sustainability Officer, maintain the organisation's focus. The Sustainability Committee, which meets quarterly, has representatives from all functions and sectors who work together to deliver our sustainability targets. We see more opportunity than risk in climate change.

For more on Land and Climate Positive see pages 32 and 33 and in our Sustainability Report (pages 20 to 29).

What we have done in 2021

- Committed to climate Science Based Targets (SBT) and became the third major chemical company in the world to have our plan to achieve them officially verified (page 12)
- Invested in market leading technology to automate the collation and internal reporting of sustainability metrics
- Committed to complete roadmaps in 2022 for decarbonisation of all our operational site and business sectors, supported by additional capital investment
- Completed full Executive review of the sustainability strategy, attended by a Board member
- Completed our periodic review of our material issues and climate related risks and opportunities (page 30)
- Prepared carbon budgets for each sector, sitting alongside the financial budgets
- Engaged our investors in sustainability (see case study on page 19)

Strategic	People and culture	Process	
Principal risks			
5. Management of business change	**6. Our people – culture, wellbeing, talent development and retention**	**7. Product quality**	**8. Loss of significant manufacturing site (major safety or environmental incident)**
Steve Foots **Group Chief Executive**	**Tracy Sheedy** Group Human Resources Director	**Tom Brophy** Group General Counsel	**Mark Robinson** President Global Operations
E C M S	E C M S	V M	V M
Why this matters to us			
Delivery of the strategic review completed in 2021 requires significant business change globally, including acquisition and disposal of businesses and investment in a significant capital expenditure programme (page 6). Such transformational change has the potential to distract the organisation resulting in failure to deliver expected results, or at worst destroy value. Ineffective management of change could result in a failure to integrate new acquisitions effectively and impact the realisation of benefits.	Retaining and developing the experience and motivation of all our knowledgeable and diverse employees is critical to maintaining our ability to deliver our strategic priorities. Failing to maintain our distinctive Croda culture (pages 2 and 8) within which people thrive and which attracts new and diverse talent to join the Company would significantly damage our ability to innovate.	We sell into a number of highly regulated applications and the transition to a focused Consumer Care and Life Sciences business increases our exposure to this environment. Weak product quality control leading to non-compliance with our customers' stringent product quality requirements and global and local regulation could expose us to liability claims, significant reputational damage and compromise our ability to deliver growth.	We rely on the continued sustainable operation of our manufacturing sites around the world, including newly acquired sites. Climate change directly impacting the location of a site or availability of utilities used, or a major event causing loss of production and violating safety, health or environmental regulations, could limit our operations. This could also expose the Group to liability, cost and reputational damage, especially in light of our commitment to sustainability and customer service.
How we respond			
The Board and Executive have oversight of the strategic change programme and receive regular updates of status and progress. Skilled programme managers, supported by external consultants, lead our delivery of change programmes, including the PTIC separation, and our Capital Project Director monitors and oversees the capital investment programme. We also acknowledge that the potential separation has to be technically well designed to minimise the impact on the organisation.	A clear Purpose, strong development culture, excellent learning opportunities and competitive reward programmes support the retention, engagement and career development of the high-quality teams we need. Global graduate and management development programmes include stretching and high-profile assignments and provide a pipeline of internal talent. Our bi-annual global talent review process considers resources and succession plans for critical roles, with actions monitored by the Executive Committee and the Board.	Monitored by our Group SHEQ Steering Committee (page 52), our sites and products are certified to demanding external quality standards highly valued by our customers (including ISO 9001, GMP and Excipact). Our global network of quality professionals enforce compliance with the Group Quality manual, assured through internal audits delivered by our specialist Group Quality audit team and external certification audits. We work proactively with relevant trade associations to shape future regulation.	Monitored by our Group SHEQ Steering Committee (page 52), our global network of site-based safety professionals enforce compliance with global policies and procedures defined in the Group SHE manual. Assurance is provided by the specialist Group SHE internal audit team, whilst external auditors certify our compliance with international safety standards. Our sites are certified to ISO 14001 standards. Risks specific to each site are identified in 'bottom-up' risk registers and local business continuity plans are in place which are regularly tested.
What we have done in 2021			
• Considered the implications of the sale of the majority of the PTIC business through a Board and Executive process extending over many months (case study page 69) • All major change programmes are subject to oversight from Executive level steering groups and have an Executive level sponsor. Progress is reported to the Board on a periodic basis • Separation Programme Director and workstreams supported by external consultants • Dedicated programme management for other significant change programmes • Global Capital Project Director developed capital projects framework and governance to monitor progress in capital projects	• Reviewed and upgraded all our internal leadership programmes in conjunction with Hult Ashridge business school (page 36) • Continued to expand our online training courses and our mentoring programmes • Developed and launched a new global competency framework to support and enhance the roll out of our values, a summary of our cultural aspirations (page 36) • Addressed increased risks to employee wellbeing and mental health through the provision of employee assistance programmes, online mental health tools, wellbeing activities and increased communications • Continued to benchmark rewards regionally, introduced new reward and recognition programmes and the Croda Free Share Plan (pages 90 and 91) • For more on our people see page 30 of our Sustainability Report	• Life Sciences appointed sector Head of Quality to lead and monitor delivery of GMP standards across all sector manufacturing sites • Developed and applied a customisable quality toolkit across all our sites to accelerate progress towards our sustainability target of 99.5% right first time in manufacturing operations. The resulting improvements mean we are ahead of schedule • Demonstrated the strength of our quality management systems by continuing to deliver to customers despite supply chain disruptions (see case study on page 51) • For more on quality assurance see page 39 of our Sustainability Report	• Prepared a new suite of process safety guidance standards, developed in consultation with members of the Group-wide Process Safety Leaders Academy • Adopted an enhanced approach to process safety, aligned with Sustainability Accounting Standards Board (SASB) standards for our industry • Undertook process safety training of regional leadership teams • Delivered SHE leadership training to the management teams of businesses acquired in the last two years • Continued focus on process safety leading metrics, which drive our investment in assets • For more on process safety and environmental stewardship see page 37 of our Sustainability Report

Key

Link to our strategy (page 20)

- **Sustainability:** align our business with our Purpose and accelerate our customers' transition to sustainable ingredients
- **Innovation:** increase the proportion of NPP that we sell
- **Growth:** consistent top and bottom-line growth

Risk movement

- Risk increase
- No change
- Risk decrease
- V Included in viability statement (see page 57)

Link to our business model (page 16)

- E Engage
- C Create
- M Make
- S Sell

External environment	Business systems and security
Principal risks	
9. Ethics and compliance	**10. Security of business information and networks**
Tom Brophy **Group General Counsel**	**Jez Maiden** **Group Finance Director**
V E C M S	V E C M S

Why this matters to us

9. Ethics and compliance

We are subject to UK legislation which is far-reaching in terms of global scope and often more rigorous than local legislation (for example, the Bribery Act).

Our increased presence in emerging economies and the increasingly frequent introduction of new regulation create an elevated compliance and reputational risk.

10. Security of business information and networks

Society and business are subject to more numerous and increasingly sophisticated threats to security, including hackers, viruses and ransomware attacks, and keeping our data safe is subject to increasingly stringent regulatory requirements globally. Our business model relies heavily on the availability of IT networks and systems; an extended interruption of these services may result in an inability to operate.

How we respond

9. Ethics and compliance

Our Group Ethics Committee (page 73) meets quarterly to consider new legislation requirements and to promote the importance of ethics and compliance across our business and stakeholder ecosystem.

Compliance training and education programmes are rolled out globally, with results monitored by the Committee.

Our Audit Committee reviews the effectiveness of the Group's anti-bribery and fraud procedures on an annual basis (page 81).

10. Security of business information and networks

We run our key applications in distributed computing environments with regular failover testing and penetration testing being undertaken. Our information security specialists monitor our IT services and networks, oversee cyber protection solutions and provide cyber awareness education globally, whilst internal and external auditors review and report on the operation of cyber and system controls annually.

What we have done in 2021

9. Ethics and compliance

- Continued with the ethics integration of newly acquired companies, with particular focus on those in emerging markets with the associated higher ethical risks
- Developed an automated KPI dashboard that enables the tracking and monitoring of the ethics programme and provides leading and lagging indicators of ethical risks
- Supplemented the ethics procedures manual with practical 'how to do' guidance notes. The Group undertakes ethics risk assessments at site level, which record detailed risks and mitigating controls
- Undertook over 2300 third-party reputational screenings
- Undertook our annual review of antibribery and corruption, fraud and whistleblowing procedures (page 83)
- Reported to the Board on the ethical compliance programme (page 66)

10. Security of business information and networks

- Developed and adopted a new medium-term information security strategy
- Assessed our IT operations against the NIST Cyber Security Framework
- Developed new security controls within Croda's Operational Technology environment at a pilot manufacturing site
- Conducted a third-party facilitated review of data privacy compliance, to maintain the health of the global data privacy framework and improve where necessary
- Completed an in-depth review of the IT control framework, including assessment of governance and monitoring processes (page 81)
- Carried out an internal audit review to provide assurance over asset management and third-party processes
- Carried out a full review of cyber security controls at Incotec China

Long-term viability statement

Based on their assessment of prospects and viability, the Directors confirm that they have the expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the next three years.

Confirmation of viability

Based on their assessment of prospects and viability, the Directors confirm that they have an expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the next three years to 31 December 2024. The Directors also considered it appropriate to prepare the financial statements on a going concern basis, as explained in the Group accounting policies (page 125).

The viability assessment period

The Directors have assessed the longer-term viability of the Company over the three year period to 31 December 2024, taking account of the Company's current financial position and the potential impact of the Company's principal risks identified on pages 53 to 55.

For 2021 the Board considers that, in assessing the prospects of the Company and determining the appropriate viability period, its investment and financial planning horizon of three years is the appropriate benchmark. In reaching this conclusion they considered the following:

- the three year financial planning horizon, supported by detailed financial modelling which considers profitability, cash flows, gearing and other key financial metrics;
- the three year investment planning cycle which reflects the typical maximum lead time involved in developing new capacity. Both financial and investment planning are led by the CEO and reviewed by the Board;
- the Company has demonstrated a strong balance sheet and cash generation which ensure its ability to repay, renew and raise new debt facilities in most market conditions (page 49). The most common debt maturity term is five years;
- the resilient business model (page 16) and the Company's diversified portfolio of products, operations and customers, which reduce exposure to specific geographies and markets, as well as large customer/product combinations; and
- the strong, sector-led innovation pipeline (pages 24 to 29) extending over more than three years, which supports the Company's business through development of new sales growth opportunities, protects sales and margins, differentiates the Company from competitors and provides barriers to entry

Given the progressive development of a longer term strategic plan for the Group, the Board will review over the coming year whether it is appropriate to consider a longer viability period in future Annual Reports.

Assessment of viability

We assess our longer-term resilience to risk in two ways:

- Top down: we test the Company's overall funding capacity to withstand catastrophic events through stress testing the reduction in EBITDA required to breach the bank leverage covenant;
- Bottom up: we assess the existing unused committed liquidity available and peak debt leverage rates under multiple bottom-up worst case risk scenarios, both individually and in combination. These risks are the principal risks which present long-term threats to the business as identified through our risk management process (page 50) and agreed by the Board. To ensure consistency, we use the base case model developed for going concern assessment (page 125).

In 2021 we assessed viability assuming the sale of the majority of our Performance Technologies and Industrial Chemicals business ('PTIC sale') (page 11) will complete in summer 2022. We completed additional scenarios to assess the impact of this sale not completing on the Group's viability, with the outcome described on page 57.

Assuming a successful PTIC sale, under each worst case combination of scenarios, top-down headroom is considered to be more than adequate. The results of the bottom-up scenario modelling showed that no individual event or plausible combination of events (the most significant of which was scenario F) would give rise to a financial impact sufficient to endanger the viability of the Company in the period assessed, with ample liquidity and debt leverage headroom against funding covenants.

Were the PTIC sale to be unsuccessful, using the same scenarios, the bottom-up modelling also showed that the financial impact of a severe but plausible combination of events would not endanger the viability of the Company but would require additional funding to be put in place (which is expected to be available).

Top-down liquidity headroom

We assess our overall funding capacity to withstand catastrophic events by stress testing the EBITDA reduction required to trigger the default of the bank leverage covenant, and the current level of committed debt facilities which mature within the viability period.

- Bank leverage covenant: the leverage ratio at the end of 2021 of 1.4x remains substantially below the maximum covenant level under the Group's debt facilities of 3.5x. Based on 2021 results, stress testing assesses that EBITDA would need to fall by 66% to trigger an event of default. In the event that the maximum covenant level was reached we would also take action to conserve cash;
- Unused committed liquidity headroom: at 31 December 2021 over 78% of the current level of committed debt facilities of £1,226m mature after the end of the viability period, with current committed unused headroom of £334m (page 153). The Company expects to have access to additional liquidity funding in most market circumstances.

Bottom-up risk scenario headroom

We consider the potential financial impact of combinations of the Group's principal risks identified on pages 53 to 55, both individually and in plausible combination. Using the going concern base case model, we assess the impact of the risks on EBITDA and the consequent cumulative impact on net debt over the three year period based on worst case impact assumptions. The combinations modelled are identified below:

Scenario combination modelled	Key assumptions	Principal risks (pages 53 to 55) considered*	Assuming PTIC sale		Assuming no PTIC sale	
			Unused committed liquidity (£m)**	Peak debt leverage	Unused committed liquidity (£m)**	Peak debt leverage
A: Regulatory issues damage reputation, enabling competition across multiple market sectors and loss of business.	Loss of business in Personal Care and Health Care	1. Revenue generation 4. Delivering sustainable solutions – Climate and Land Positive	600	0.4x	200	1.3x
B: Disruptive competitive technology and supply chain disruption results in loss of significant business.	Alternative production technology, limited availability of key raw material and fail to deliver digital strategy	2. Product and technology innovation and protection 3. Digital technology innovation Security of supply***	600	0.4x	200	1.4x
C: Significant cyber attack results in loss of IT systems for a prolonged period impacting ability to operate.	Cyber attack results in loss of key systems	10. Security of business information and networks	600	0.5x	200	1.6x
D: Significant compliance breach combined with a significant cyber attack damages our reputation resulting in loss of business.	Cyber attack and major compliance breach leading to government investigation and fine	9. Ethics and compliance 10. Security of business information and networks 4. Delivering sustainable solutions	600	0.4x	200	1.5x
E: Product recall from product quality failure results in loss of business.	Damages and costs from product recall in Health Care	7. Product quality 1. Revenue generation	300	1.3x	additional funding required	2.4x
F: Catastrophic uninsured loss of manufacturing capability damages reputation resulting in loss of significant business.	Uninsured loss of major UK and US manufacturing sites resulting in lost margin for an extended period	8. Loss of significant manufacturing site 1. Revenue generation	300	1.5x	additional funding required	2.5x
Risks considered to have a slower velocity, giving the Group time to take mitigating action.		6. Our people 5. Management of business change				

* See how we respond to mitigate these risks on pages 53 to 55
** Excluding cash on deposit
*** Not a principal risk in 2021

Considering the impact of the sale of the majority of PTIC

The approach adopted to assess the impact of the sale of the majority of the PTIC businesses was to overlay the cash impact of not receiving the agreed proceeds on the debt headroom and debt gearing covenant over the three year viability period, using the same scenario combinations. We also considered a less impactful scenario of a limited warranty claim as a result of failing to separate the business effectively.

Linking to going concern assessment

The same base case and business model is used to assess the impact for both the viability statement and the going concern assessments. For more on going concern see page 125.

> "Our strong well established governance framework underpins the delivery of the strategy and all our decision making by ensuring accountability, responsibility and transparency."
>
> **Anita Frew**
> Chair

Anita Frew
Chair

Dear fellow shareholder

Despite the ongoing challenges in 2021 associated with the COVID-19 pandemic, the Board was able to work together with the Executive Committee on a five-year strategy centred on sustainability and innovation to deliver growth. This focus and collaboration were enabled through our clarity of Purpose and a well-established and transparent governance framework. Together these underpin our decision making, ensuring we balance the interests of all our stakeholders whilst continuing to promote the long-term interests of the Company for our shareholders to provide a good return on their investment in Croda.

At the same time, we have remained focused on supporting the wellbeing of our employees across the Group, who have once again shown exceptional resilience to the challenges presented to them during the year. Our employees have continued supporting our customers, suppliers and local communities and there are many examples of this throughout this report. I am also delighted that we continued with our track record of paying regular dividends to our shareholders.

This report, together with the Directors' Remuneration Report, set out on pages 84 to 108, describe how the 2018 UK Corporate Governance Code (the Code) principles have been applied by the Company. I am pleased to report that the Company has complied with the provisions of the Code for the period under review. The 2018 UK Corporate Governance Code is available at www.frc.org.uk.

Our strategy and stakeholders

As well as collaborating with the Executive team on the development of our five-year strategy, focusing on our Consumer Care and Life Sciences market sectors, the Board spent a considerable amount of time overseeing the disposal of the majority of our Performance Technologies and Industrial Chemicals business. As well as considering the strategic and financial implications of the disposal for Croda, the Board took account of the interests of our key stakeholders; this is further described in the case study on page 69.

The Board continued with the regular scheduled programme of meetings through in-person meetings when possible, via video conferencing and additional calls were held as required throughout the year. Our first priority in the Board meetings is always the health and safety of all our employees and others impacted by our operations.

In our meetings, we were presented with a number of strategic deep dives, which this year covered health and safety, our Health Care and Consumer Care businesses, innovation and also our operations strategy. These allowed the newly appointed Presidents of Consumer Care and Life Sciences to present to the Board on their strategic vision of the future for these businesses. These were then debated and challenged.

In all its deliberations and decisions, the Board is always mindful of the impact on the business' various stakeholders and on its long-term, sustainable success, in line with Section 172(1) of the Companies Act 2006.

We describe on page 68 how the Board engaged with each of our key stakeholders during 2021 and give some examples of how we have considered their interests in some of the Board's decisions made during the year.

Leadership and diversity

We consider that creating an inclusive Board is essential to ensuring we attract a diverse set of candidates for Board roles. The greater the diversity of our directors, the more likely we can foster innovative thinking in the boardroom.

On 1 September 2021 we welcomed Julie Kim to the Board and more recently on 1 February 2022 we were joined by Nawal Ouzren. These two additional Non-Executive Director appointments have brought fresh perspectives to our discussions and support our strategic priorities. We look forward to working with them in the years ahead.

Following these appointments, I am delighted to report that the composition of the Board not only meets, but exceeds the ambitions set out in the Hampton-Alexander and Parker reviews for FTSE 100 companies. Our approach to the recruitment of these directors and to maintaining this Board diversity is set out in the Nomination Committee Report on pages 76 to 77.

The composition of the Executive Committee was reviewed and refreshed with the appointment of new members following consideration of the talent, development and succession throughout the business. Details of these changes and our succession processes are included in the report of the Nomination Committee.

On the recommendation of the Nomination Committee, the Board agreed to extend my appointment for a further year following the completion of my second three-year term of office. This annual extension is in line with our policy to review appointments annually once six years' tenure has been completed. Helena Ganczakowski's appointment for a further year was also recommended and agreed by the Board. Roberto Cirillo and Jacqui Ferguson completed their first three-year terms and the Nomination Committee recommended to the Board that their appointments be extended for a further three years. Before making the recommendations to the Board, the Nomination Committee considered the contribution made to the Board and the Committees by the individual and their time commitments. No director being considered for re-appointment took part in any discussion relating to their own appointment. Further information about the tenure of other Board members can be found on page 75.

Board evaluation

I am pleased to report that the Board evaluation this year confirmed that we continue to operate as a very effective Board. With the addition of our new Non-Executive Directors we have the right composition, experience, skills and diversity on the Board to support the strategic ambition of the Group as we emerge from the pandemic. Full details of the evaluation and the outcomes are included in the report on page 74.

Annual general meeting

Last year in light of government guidance relating to COVID-19 prohibiting public gatherings and restricting non-essential travel, shareholders were strongly advised not to attend the Annual General Meeting (AGM). We know our AGM provides investors with a valuable opportunity to communicate with us and this dialogue is very important to the Board. We therefore arranged an online shareholder presentation from Steve Foots which included the opportunity for shareholders to attend virtually and ask questions at, and in advance of, the meeting.

Company Culture

Our Purpose, values and culture are discussed in the Strategic Report.

Our Purpose is to use our Smart science to improve Lives™, and guides the choices we make as a business. In line with our Purpose we have committed to be the most sustainable supplier of innovative ingredients by ensuring we are Climate, Land and People Positive by 2030.

Our Purpose is reflected in the Board's strategy and is underpinned by our values and our unique culture. The cultural tone of the Company is set by the Board, who are responsible for assessing, monitoring and promoting the company culture through its decisions and conduct. Further information on how the Board factors stakeholders into Board decisions is on pages 68 to 69.

Croda's positive culture continued to support employees, suppliers, customers and our local communities throughout the second year of the pandemic and examples of this can be seen throughout this report. During the year the Croda Foundation made its first grants to employee nominated projects that that will help improve the lives of our local communities around the world.

During 2021, the Board monitored and assessed culture through multiple sources:

- Inviting employees to present at Board and Committee meetings.
- Regularly meeting with management. See page 64 for information on Board interaction outside the boardroom.
- Receiving regular reports and data on health and safety and sustainability matters. These were of prime focus for the Board.
- Receiving regular quarterly reports from all areas of the business including corporate functions. These include progress and compliance with key performance indicators.
- Reviewing reports on significant instances of inappropriate conduct, whether through the Company's Speak-Up line or other grievance channels.
- Engaging directly with employees around the world through listening groups, site visits and town halls.
- Discussing the feedback from listening groups and pulse surveys, which enabled communications and policies to be tailored and adjusted to ensure employees' needs were being met.
- Assessing management's attitude to risk and assurance of the external and internal audit functions through the work and reports of the Audit Committee.
- Reviewing the work on diversity and inclusion and succession planning through the reports of the Nomination Committee.
- Receiving feedback from the Remuneration Committee. The Remuneration Policy is aligned to culture and also embedded in the Remuneration Committee's discretion framework is an assessment of our cultural performance. Maintaining this alignment will form a vital part of the review of the Remuneration Policy in 2022. Further detail on how remuneration is addressed across the Company is included in the Remuneration Committee report on pages 84 to 108.

The Board was satisfied that Croda's Purpose, values, strategy and culture are aligned and will act together to preserve long-term value.

This year we will be holding a hybrid AGM, with the ability for shareholders to attend in-person or join virtually. Our AGM will take place on 20 May 2022 and I look forward to being able to meet with many of you in-person once again. More details of this event are set out in the Notice of Meeting and I would be delighted to see you, whether in-person or online, and answer any questions that you may have.

Anita Frew
Chair

Board leadership & company Purpose

Contents of corporate governance report

UK Corporate Governance Code (the Code)

For the year ended 31 December 2021 the principles of good corporate governance contained in the 2018 UK Corporate Governance Code have been complied with.

The Annual Report has been structured to allow shareholders to evaluate how the Code Principles have been applied. Cross references are included where appropriate to where supporting information is contained outside of the Directors' Report.

Further information on the Code can be found on the Financial Reporting Council's website at: www.frc.org.uk

Board leadership

The Company is led by an effective and entrepreneurial Board, whose role is to promote the long-term sustainable success of the Company, generating value for shareholders and contributing to wider society. The Board has ultimate responsibility for the overall leadership of the Group. In this role, it oversees the development and delivery of a clear Group strategy.

At the date of this report, the Board comprises 10 Directors: the Chair; the Group Chief Executive; the Group Finance Director; six independent Non-Executive Directors and one non-independent Non-Executive Director, who was the Company's Chief Technology Officer until his retirement in 2017. The size of the Board allows time for constructive debate and challenge on key elements of the Company's performance and strategic projects and enables all Directors' views to be heard. It monitors operational and financial performance against agreed goals and objectives and ensures that appropriate controls and systems exist to manage risk and that there are the necessary financial resources and people with the necessary skills to achieve the strategic goals the Board has set. The Non-Executive Directors have a broad range of business, financial and international skills and experience, which provide appropriate balance and diversity.

The Directors' biographical details appear on pages 62 and 63 and at www.croda.com.

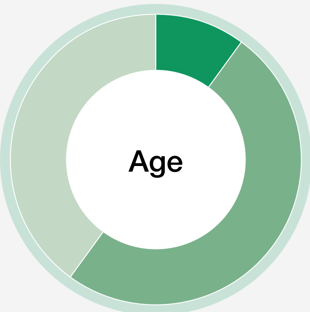
The Board maintains a formal schedule of matters reserved for its approval. These matters include approving the Group's strategy and budget, material corporate transactions and the authorisation of capital expenditure above delegated authority limits. They include matters relating to risk management, approval of the Annual Report and Accounts, dividends, appointing new directors and significant communications to shareholders.

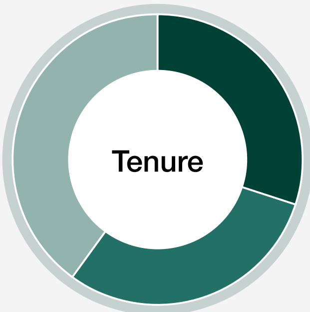
The full schedule of matters reserved for the Board can be found in the governance section at www.croda.com.

The Board discharges some of its responsibilities directly and others through its Committees, details of which can be found on page 73.

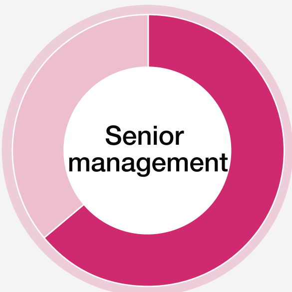
Execution of the strategy and day-to-day management of the Company's business is delegated to the Executive Committee, and subsequently to senior leadership teams where relevant, with the Board retaining responsibility for overseeing, guiding and holding management to account. In addition to its monthly scheduled meetings, the Board met and heard from the Executive Committee members, senior management and a wider range of colleagues on a regular basis. Contributions from the Executive Committee members can be found throughout this report.

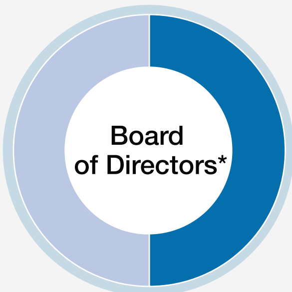
Board balance





Gender balance





* As at 28 February 2022. Post-year end appointment means we have now achieved full gender balance on the Board of Directors.

Our Leadership Team

We have a Board that is well equipped to provide oversight and challenge to the Executive Committee and has the breadth of skills, experience and diversity to lead the business in delivering our ambitious strategic priorities that will deliver long-term growth.

N

Anita Frew
Chair

Appointment: March 2015 and Chair since September 2015

Nationality: British

Anita has served on Plc boards in the chemical, resources, engineering, water and financial services industries for over 20 years. Prior to joining Croda, she was Chair of Victrex Plc and Senior Independent Director of Aberdeen Asset Management Plc, IMI Plc and was Deputy Chair of Lloyds Banking Group Plc. During her time as a Director, she has chaired main Boards, Remuneration, Responsible Business and Risk Committees. Currently she is also Chair of Rolls-Royce Holdings Plc. Anita brings extensive experience as Chair to the Croda Board as well as leadership in strategic management, mergers and acquisitions and risk experience from working internationally across many sectors.

E F SHEQ

Steve Foots
Group Chief Executive

Appointment: July 2010 and Group Chief Executive since January 2012

Nationality: British

Steve joined Croda as a Graduate Trainee in 1990 and brings to the Board a business, strategic and operational background gained from a number of senior leadership roles across the Group. Having spent several years leading many different Croda businesses, he has also gathered extensive insight into the markets served, the importance of customer focus and the power of an innovative culture. Outside of Croda, Steve's role as Industry co-Chair of the UK Chemistry Council enables him to work alongside Government Ministers and industry peers to bring wider industry knowledge into the Croda business.

R E F

Jez Maiden
Group Finance Director

Appointment: January 2015 as Group Finance Director

Nationality: British

Jez is an experienced Group Finance Director, having served in this role on five UK listed company Boards. As a chartered management accountant, his expertise in all aspects of finance management, gained in speciality chemical, FMCG and other manufacturing environments, allows him to support the Board and Executive of Croda in managing the performance of the business, risk management and control, and in capital allocation and investment evaluation. Jez acts as business partner to the Group Chief Executive and leads the finance, IT and digital teams. He is also on the Board of the Centre for Process Innovation Ltd, an independent technology innovation organisation, and has also been a Non-Executive Director and Audit Committee Chair in two other UK Plcs.

RM A N

Helena Ganczakowski
Non-Executive Director (Senior Independent Director)

Appointment: February 2014

Nationality: British

With 23 years of experience in marketing and corporate strategy at Unilever and a further eight as a strategic consultant for other multinational businesses, Helena brings marketing skills and an end-consumer perspective to the Croda boardroom, as well as challenge and support to the CEO in strategy development. Her academic roots in engineering, with a PhD from Cambridge University, drive her passion and curiosity for both product and process innovation.

Helena is also a Non-Executive Director and Remuneration Committee Chair of Greggs Plc.

Key

Chair of the Committee	
Member of the Committee	
Secretary of the Committee	
Nomination Committee	N
Remuneration Committee	RM
Audit Committee	A
Risk Management Committee	R
Group Executive Committee	E
Group Ethics Committee	ET
Group Finance Committee	F
Group SHEQ Committee	SHEQ

A RM N

John Ramsay
Non-Executive Director

Appointment: January 2020

Nationality: British

John has over 30 years' broad-based international finance background with Life Science businesses such as ICI, AstraZeneca and Syngenta. A large part of this experience was gained while working in Latin American and Asian countries. John brings extensive knowledge of business strategy to the Croda Board as well as a keen interest in building on Croda's strong culture to deliver superior business performance. He is also a member of the Supervisory Board at Koninklijke DSM NV and a Non-Executive Director at RHI Magnesita NV and Babock International Plc. He is also Audit Committee Chair at each of these companies.

A RM N

Roberto Cirillo
Non-Executive Director

Appointment: April 2018

Nationality: Swiss

With ten years' experience as Country and Group CEO in the Service and Health Care industries, and many years spent as a strategy practitioner in Europe and Asia, Roberto brings knowledge of, and passion for, growth and operations to the Croda boardroom. He can also share lessons learned from large transformations and M&A. Roberto's engineering background enables him to link Croda's R&D and production competences with the evolving demands of its multinational markets.

Alongside his role as Non-Executive Director for Croda, he is CEO of Swiss Post. He was previously the Group CEO at Optegra Eye Health Care Ltd, France CEO and Group COO at Sodexo SA and Associate Partner at McKinsey & Co.

A RM N

Jacqui Ferguson
Non-Executive Director

Appointment: September 2018

Nationality: British

Jacqui is an experienced CEO from the technology industry with general management and M&A experience in international and emerging markets. She has first-hand insight of transformational/disruptive digital, cyber security, technology and business process solutions. Jacqui spent three years in Silicon Valley as Chief of Staff at Hewlett Packard, focused on a new company strategy and turnaround. Away from Croda, she is a Non-Executive Director of John Wood Group Plc and Tesco Bank, a fellow of the IET, a Trustee of Engineering UK and a member of the Advisory Board of Engie UK.

N

Keith Layden
Non-Executive Director

Appointment: February 2012 and Non-Executive Director since May 2017

Nationality: British

Keith brings to the Croda Board 33 years' experience of working at Croda in a variety of positions, most recently leading the Global Research, Development and Innovation function and as President of the Global Life Sciences business. He also has an interest and background in organisational culture, which is a key consideration in the decision making of the Board. In his roles of Honorary Professor of Chemistry and Industry at the University of Nottingham, member of Council at the University of Sheffield and a Fellow of the Royal Society of Chemistry, he widens his network of emerging technology companies and research institutes to spot new talent that will aid Croda's future success.

A RM N

Julie Kim
Non-Executive Director

Appointment: September 2021

Nationality: US

Julie has nearly 30 years of experience in the health care industry, with more than 15 years in international leadership positions. She is currently President, Plasma-Derived Therapies at Takeda Pharmaceutical, a global, values-based, R&D-driven biopharmaceutical leader headquartered in Japan.

Her geographic experience covers both global and regional roles, focused on Europe, Asia and Latin America.

Previous executive positions include roles as Head of International Market Access and Global Franchise Head of multiple therapeutic areas at Shire, Baxalta and Baxter.

Julie also sits on the industry board for the Plasma Protein Therapeutics Association.

ET A RM N R E

Tom Brophy
Group General Counsel and Company Secretary

Appointment: December 2012 as Board Secretary

Nationality: British

Tom is an experienced corporate lawyer, having worked at City law firm Hogan Lovells and FTSE 100 company Ferguson. His expertise in public and private acquisitions supports Croda's inorganic growth plans and his professional background and breadth of experience in insurance, risk and compliance enable him to Chair the Ethics Committee. He has also acted as Managing Director of the Western European Region.

Tom provides corporate governance knowhow to the Board and Croda. Having spent many years leading global teams, Tom leads the Legal and Company Secretary team.

Appointment since the year end

A RM N

Nawal Ouzren
Non-Executive Director

Appointment: February 2022

Nationality: French

Nawal has 20 years of expertise across a wide range of international business roles, including clinical development, operational and strategic management roles within the pharmaceutical industry. Nawal currently serves as CEO at Sensorion, a Euronext listed biopharmaceutical company headquartered in France.

Nawal brings with her first-hand experience in biologics and novel gene therapies and is a Non-Executive Director of Arena Pharmaceuticals, the US headquartered biopharmaceutical company.

Board activity in 2021

Board activity in 2021

Board meetings are the main forum for the Directors to debate, review and challenge strategic, operational and governance matters concerning the Company, as required to ensure that the Directors discharge their duties including under section 172(1) of the Companies Act 2006.

There were seven meetings of the Board during the year. In addition to the formal Board meetings, the Board had additional ad-hoc update calls to discuss business performance and key projects as they progressed. This ensured that sufficient time was given to allow in-depth consideration of our stakeholders in relation to the key decisions made by the Board.

The Board agenda has strong links to the strategic objectives for the business and is set via a collaborative process between the Chair, Group Chief Executive and Company Secretary. The Board agenda programme ensures that strategic, operational, financial, human resources and corporate governance items are discussed at the appropriate time with additional deep dives into key strategic areas during the year. This ensures enough time is allocated to allow effective discussion.

A separate strategy day, attended by members of the Executive Committee, is held during the year. The strategy day is held in the first half of the year, followed by the consideration of the strategic plan in the autumn and then the approval of the budget towards the end of the year.

See more on our strategic priorities on pages 20 and 67 of this report.

The Group Chief Executive's report to the Board focuses on strategic and operational activities. A safety report is always the first matter he reports on at each meeting, with a focus on both employee behavioural safety and process safety issues. The CEO's report also covers the performance of each business unit, including sales and regional activity as well as competitor insights and performance. Market trends and opportunities are considered and dialogue with major customers and regulatory bodies discussed. Each quarter the Board receives comprehensive reports from members of the Executive Committee in relation to all aspects of the business, including market sectors, regional delivery, sustainability, operations, innovation, people, risk and functional updates. This is in addition to the deep dive sessions covered under the Board's programme of business.

The Group Finance Director presents reports on monthly and year to date sales performance, profit, cash flow, cost base, capital expenditure and outlook for the year. The CFO also reports during the year on performance against budget, dividends, treasury items, including liquidity, and keeps the Board abreast of investor discussions and feedback.

The Group General Counsel and Company Secretary updates the Board on changes to relevant laws, regulations and governance matters at each Board meeting. In addition, he takes responsibility for reporting on compliance and insurance matters.

Outside the boardroom

The Board were unable to undertake in-person site visits in 2021 due to ongoing UK and overseas Government travel restrictions. They were, however, able to participate in three virtual Board visits during the year, in Brazil, Spain and China. These virtual Board sessions included Town Halls with question and answer sessions and presentations from local management and operational employees. The presentations covered briefings on health and safety and key risks at each site as well as a review of the current performance (both financial and non-financial) and the future strategy in each country. Further detail of the virtual site visit to Iberchem as part of the Board strategy day is on page 66.

In addition to these site visits, an extensive programme of listening groups was undertaken and further information on these can be found on page 70.

The Executive Committee attended a two day strategy session on sustainability strategy, which the Senior Independent Director attended and reported back to the Board.

The Chair spends time interacting with the Executive Committee team between Board meetings; during 2021 each member of the Executive management team had monthly meetings with the Chair. This ensured that she was kept up to date on significant developments and emerging issues and opportunities, as well as forging good working relationships with the senior management team.

The Non-Executive Directors have direct access at any time to the Executive Directors, senior management teams and employees across the Group. This provides the opportunity to develop a deeper understanding of the Company's operations or to request information about specific areas. These interactions not only build connections with the employees in the business, they also help provide the knowledge for Non-Executive Directors to provide constructive challenge at Board meetings. Each of the Directors (excluding the new appointees) has a mentoring relationship with employees below the Executive Committee level. This will be extended to the two new Non-Executive Directors once they have completed their induction programme. The Executive Directors use the specific areas of expertise of the Non-Executive Directors as a source of ideas, experience, as well as challenge when developing strategic plans.

The Chair and Non-Executive Directors met without the Executive Directors present to allow an additional opportunity to discuss areas relevant to the operation of the Board. The Non-Executive Directors also met on their own, without the Chair.

The Board activities during the year are outlined on page 65. All these activities and outputs provide the context for future strategic decisions. References are made in this section to areas of the report where further information on the activities outlined below can be found.

Training

All Directors keep their knowledge and skills up to date and include training discussions with the Chair in their annual performance reviews. As required, professional advisers are invited to provide in-depth updates and the Board also receives updates on market trends, environmental, technological and social considerations when appropriate. The Company Secretary provides regular updates to the Board and its committees on regulatory and corporate governance matters. Our Directors receive training on their duties under section 172(1) of the Companies Act 2006 as part of their induction process from the Group's corporate lawyers. All Directors participate in online compliance training courses as required.

Board activity breakdown

Key highlights and priorities of the Board's activities in 2021 are set out on pages 65 to 67 along with an estimate of the proportion of time that the Board spent discussing each area.

Strategy (50%)

- Group strategic ambition and priorities, Group strategic projects and targets and regular updates on progress
- Disposal of a significant part of the Performance Technologies and Industrial Chemicals Business
- Sustainability strategy and targets
- Growth priorities and future markets
- Business presentations from all sector Presidents
- Product innovation programmes and technology platforms
- Consideration of acquisition opportunities, including Parfex and Alban Muller
- Digital strategy
- Product manufacturing strategies
- New and Protected Products pipeline
- Capital Expenditure submissions to ensure appropriate capacity infrastructure to meet Croda's strategic ambitions.

Strategic deep dives

Sustainability strategy and approach

- The Croda Sustainability Committee attended a Board meeting to review the achievements of the Committee and focus for 2021.
- Discussed the strategic commitments to 2030 and the associated Science Based Targets.
- Received an update from the Chief Sustainability Officer of the progress during the year, and detail on the work on the sustainability strategy refresh.

Information on our sustainability approach can be found from page 30 to 43.

Operations Strategy

- Received an update on operations strategy progress with a more detailed focus on activity relating to expanding capacity in support of our strategic objectives.
- Approval of the 2030 roadmap covering the six strategy themes, which formed the starting point for defining more detailed execution plans with the buy in of the appropriate parts of the organisation.

Information on operations can be found from page 10.

R&D and innovation strategy

- Reviewed the detail of the innovation model to support the strategic objectives.
- Considered the impact of new technology platforms on the 2030 sustainability targets.

Information on our dynamic innovation model can be found on page 4.

Health Care and Drug Delivery Strategy

- Evaluated the Health Care strategy by reviewing the current position and market opportunities. Considered the future vision and process to achieve it.
- Received a presentation from an external specialist in the development of vaccines and diagnostics which provided unique insights.

Information on our Health Care business can be found on page 26.

2021 Capital Expenditure Review

- Reviewed actual delivery against planned delivery of the material capital expenditure projects in the previous 12 months.
- Discussed trends, learnings and opportunities for improvement that can be taken forward into ongoing and future strategic initiatives.

Talent review

- Debated the competency framework and definition of high potential talent at Croda.
- Reviewed Executive Committee succession and succession development profiles for new emerging talent.
- Endorsed the relaunch of the refreshed leadership development programmes.

Information on culture and succession planning can be found on page 36 and in the report of the Nomination Committee on page 76 to 77.

Safety, Health and Environment

- Reviewed the performance of both behavioural safety and process safety across the group, including leading and lagging performance indicators and information on specific incidents.
- Discussed mental health and wellbeing of employees.
- Reviewed the training needs of the Board to ensure knowledge is kept up to date.

Board activity in 2021 (continued)

Financial, risk and performance management (25%)

- Group trading performance, including COVID-19 response.
- Monthly updates on financial performance by business unit.
- Review of significant control weaknesses report.
- Review of key risks, internal and external assurance of each risk. See page 50.
- Review of risk appetite statements.
- Dividend policy and dividend approvals.
- Long-term viability statement. See page 56.
- The approval of the Group's budget.
- Funding requirements, planned strategic project expenditure and the timing of any disposal proceeds.
- Key performance targets and indicators.
- Long-term financial modelling and forecasts.
- A review of the Company's tax strategy.

People (15%)

- Safety, health, environment and quality. Keeping all employees and contractors safe on all sites during the ongoing pandemic.
- Succession planning and organisational restructure, including senior management succession.
- Diversity – Board diversity policy, diversity and inclusion of our workforce and the gender pay gap reporting.
- Female talent review and mentoring scheme.
- Leadership training and development.
- The Board's engagement with employees and the employee voice.
- Extension of the term of office of Anita Frew, Helena Ganczakowski, Roberto Cirillo and Jacqui Ferguson.
- Modern Slavery reporting.
- The introduction of the Free Share Plan and all-employee share save grants.
- UK pension scheme and the triennial actuarial valuation. No deficit payments will be required.

Governance and reporting (10%)

- Board and Committee effectiveness evaluation. Information on the outcomes of this can be found on page 74.
- Annual Report and Accounts and other financial statements. The work undertaken to assess that the Annual Report is a fair, balanced and understandable assessment of the Company's position and prospects can be found on page 78.
- Presentation from the Director of Investor Relations and Corporate Affairs. Review of the share price performance, valuation and investor areas of interest.
- Ethical compliance programme. See page 83.
- Group litigation reports.
- Group insurance programme is reviewed to ensure adequate protection is in place that balanced risk appetite.
- The UK pension regime new legislation and regulation.
- Governance compliance review.
- Approved the Notice of AGM 2021 and meeting arrangements.

Board strategy session

Inputs

- Global markets and competitor presentations by the Croda management teams
- First Impressions of Life Science and Consumer Care businesses by the new sector Presidents
- Customer insights by the senior management of two major customers

Outputs

- Current positioning of the businesses
- Opportunities to gain competitive advantage
- Key customer trends and expectations
- Product portfolio review
- Organisational structures required to deliver
- Current gaps in capabilities

Virtual site visit to Iberchem

Areas covered

Session one – A deep dive into the SHE culture and standards on site.

The Board looked at the current SHE structure at Iberchem, performance KPIs and any support that would be required from Group SHE.

Session two – Getting to know Iberchem better

This session reviewed the outstanding history and growth story of Iberchem and the successful financial performance. The management team presented a view of the current markets in which the business operated, an overview of its strong customer intimacy and the customer driven R&D process, which had been able to capture the most recent trends. The Board received presentations on the approach to sustainability, procurement, compliance and the workforce.

Session three – Integration with Croda

An integration steering committee had been set up to manage the integration with a detailed plan. The Board learnt about the review of the progress in realising the integration and synergies, both commercial and technology/innovation.

Session four – Growth strategy and current trading

This session reviewed the actual 2020 and expected 2021 trading results. The business plan to 2025 was discussed as was the potential for additional opportunities for the business.

Specific focus areas for 2021

Ongoing focus on safety leadership	A safety session was held, facilitated by the Group SHE Director. The Board had a particular focus on the performance of our newly acquired companies to ensure the high standards expected of all Croda businesses and leaders were being met as regards behavioural safety, process safety and mental wellbeing. In addition, the training needs of the Board were agreed and progressed, to ensure knowledge is kept up to date.
Continue to oversee delivery of the 2030 strategy, with focus in 2021 on sustainability, innovation and our Consumer Care and Life Sciences market sectors	Strategic reviews of both Consumer Care and Life Sciences were undertaken. This included an in-depth review of our fast-growing Health Care business. The Board reviewed our innovation model in support of the strategic objectives and the impact of new technology platforms on our 2030 sustainability targets.
Consider how to further enhance Board diversity	Following a detailed assessment of the required skills and experiences that would enhance the Board's support of our strategic objectives, we brought two new Non-Executive Directors onto the Board in the last 12 months; Julie Kim and Nawal Ouzren. Their appointments bring greater diversity to the Board in terms of gender, ethnicity, nationality and tenure. They also have broadened the Health Care sector knowledge around the Board table and they both bring skills and experiences as serving executives. Further details on these individuals are on page 63.
Bring more external and customer insights into Board meetings to help shape thinking and decisions	As part of the Board strategy day, two important customers were invited to attend to provide customer insights into our performance as a supplier, including in the areas of sustainability and innovation. The Board also heard from external business and industry experts on their experiences in vaccine development. These sessions proved invaluable for the Board in working alongside the Executive Committee in shaping our strategic objectives.

Focus areas for 2022

Continue our focus on Croda's strategic progress in transitioning to a pure-play Consumer Care and Life Sciences company, including key innovation programmes.

Oversee our expanded organic capital investment programme, whilst ensuring we continue to prioritise safety leadership and performance.

Continue our oversight of Croda's progressive and proactive inorganic investments in support of our strategic focus on our Life Sciences and Consumer Care businesses.

Focus on talent and succession planning at all levels within Croda, including ensuring that we continue to have the capacity and capability to support our strategic priorities.

Board engagement with our stakeholder ecosystem

The Section 172(1) statement and the key stakeholder groups that form part of our stakeholder ecosystem are on pages 18 and 19 and 68 to 71.

A key objective of the Strategic Report, Directors' Report, Financial Statements and the Sustainability Report is to help stakeholders assess how effectively the Board, supported by the Group Executive Committee, senior managers and employees, promoted the success of Croda and had regard to the factors set out in Section 172 during the year.

By understanding how Croda's activities impact on our various stakeholder groups, the Board can have regard to their interests when having discussions and making decisions. Having consideration for our stakeholders aligns with our Purpose and our values, both of which guide us in our approach to delivering our strategic commitments and promoting the long-term success of Croda for our shareholders and society.

The relevance of each stakeholder group may change depending on the issue under discussion and the Board always seeks to understand the priorities and interests of each stakeholder group during its deliberations and decision-making process. The Chair and Company Secretary provide guidance when required at Board meetings to ensure sufficient consideration is given to the likely consequences of any decisions in the long-term and to the interests and impact of such decisions on our stakeholder groups.

Our customers

Our direct sales model ensures we work closely with customers and allows us to develop a deep understanding of their needs. The Board receives customer insights and information through Board reports from the CEO and sector teams, as well as during strategy and business presentations. Our Group Chief Executive maintains oversight of the management of our key customers and regularly updates the Board on these interactions with customers and his engagement with policy makers and regulatory bodies. As part of the Board strategy day, two important customers were invited to attend to provide customer insights into our performance as a supplier, including in the areas of sustainability and innovation.

For information on our customers
P18

Our communities

As a responsible business, we believe it is essential that we operate safely and sustainably and that we understand the impact of our operations on local communities and on the environment. Living our Purpose also means we are committed to providing a positive impact to society and we nurture the links we have to our communities through our offices and our sites. The Croda Foundation has made its first grants aligned to Croda's purpose, values and expertise. The Board regularly receives information and feedback on community activities across the Group.

For information on our community activities and the Croda Foundation
P13 and 19

Our people

Our success depends on our skilled and highly committed employees who are central in our decision making process. The Board meets regularly with employees, through listening groups and board presentations. Although business travel and face-to-face meetings were again restricted during 2021, Board members continued to engage with a wide range of employees through video calls and received and discussed the results of employee pulse surveys and the listening groups. The regular reports from the HR Director and other Executive Committee members keep the Board up to date on the wide range of people initiatives.

For information on the Employee Voice, Listening Groups, workforce engagement and reward
P70 and 90

Our shareholders

Board engagement is primarily through the Group Chief Executive, Group Finance Director and the Investor Relations and Corporate Affairs Director, who maintain regular dialogue with our shareholders. Committee chairs have responded to queries from major shareholders regarding their areas of responsibility and this engagement is reported back to the Board. The Directors attend the AGM to allow shareholders to ask questions directly. Although shareholder attendance at the AGM was not possible in 2021 due to Government restrictions, a separate virtual shareholder engagement meeting was held. Analysts notes and reports from brokers and advisers are also reviewed to keep the Board informed of shareholders' views.

For information on engagement with shareholders
P19 and 71

Our suppliers

Supply chain integrity is essential to being a sustainable business and our supplier relationships provide valuable insights to the Board. Site and purchasing teams engage and partner with suppliers on a wide range of matters, from product stewardship and ethical sourcing to regulatory compliance and operational improvements. The Board understands these issues through Board reports and engagement with our operations and functional teams.

For information on suppliers
P16 and 18

See Appointment of Non-Executive Directors for detail on a key Board decision and stakeholder considerations
P75

Management is tasked with ensuring that potential impacts on stakeholders are fully considered when presenting to the Board.

Information on the key methods utilised by the Board to engage with all stakeholders is described on page 68. We also note where further detail is available throughout this report on this engagement.

The Board receives information through the following additional methods which assists the Directors in their understanding of stakeholders and to perform their duties:

- An annual strategy review which assesses the long-term sustainable success of the Group's strategy and the impact on our stakeholders. See page 66.
- Annual presentations to the Board from all the members of the Executive on the performance across the sectors and regions. A broad spectrum of employees from across the business are invited to present to the Board.
- An annual Board presentation on progress with the Group's sustainability agenda from the wider sustainability team and regular updates throughout the year. See page 65.
- The Group Chief Executive and Group Finance Director provide updates at Board meetings on their interactions with key stakeholders, as well as updating Board members between meetings on any material issues that arise.
- Comprehensive quarterly reports which cover risk, innovation, global operations including customer service, SHEQ and Sustainability, IT and Digital operations, legal and Company Secretarial and HR, culture and diversity.

Decision to divest the majority of our PTIC businesses

TB One of the major decisions the Board made during the year was to approve the sale of the majority of our PTIC businesses to Cargill. The divestment will deliver transition into a focused Consumer Care and Life Sciences company.

Given the importance and impact of this decision, it was made over many months of deliberation by the Executive team and the Board and across numerous meetings during the year.

The Board considered the likely consequences of the decision in the long term, identified the stakeholders who may be affected, and had regard to their interests as part of the decision-making process.

Initially, a detailed strategic review was undertaken that focused on the businesses and activities within PTIC that did not directly support the Consumer Care and Life Sciences sectors. The Board considered whether Croda was the best future owner of all the PTIC businesses within the context of opportunities to deploy more capital and resources within the higher returning Consumer Care and Life Sciences businesses. The review considered what ownership structure would best serve the PTIC business going forward, not only to create a stronger platform for its future growth, but importantly to provide a secure future for our employees within the business.

Soundings were taken from our advisers and the investor community at the appropriate time and the Board gained comfort that our shareholders would support the strategic rationale for the separation, which was important in confirming the direction of travel for the strategic review.

Such a complex divestment required careful management of internal and external communications, talent and resources, and of interactions and interdependencies with other Group programmes to ensure the continued successful performance of the PTIC business, as well as the management of the process itself. Steering and project implementation processes were established to ensure the Executive team remained close to the views of those affected by all the decisions under consideration.

Extensive and regular engagement by the Executive management team with our employees was undertaken. This was initially aimed at senior leaders, particularly those directly affected by the divestment, so they could absorb the news and raise concerns and questions prior to a wider all-employee announcement and to ensure they could then support the messaging. This helped reassure all our employees and enabled their views and concerns to be addressed throughout the process, which in turn minimised any disruption to our business in a time of uncertainty.

Tom Brophy is Group General Counsel and Company Secretary

Their needs were mapped and communication plans addressing those needs were developed. This communication strategy included critical stakeholders such as works councils, unions, business partners and our pension trustees. A range of communication channels were utilised, ensuring our key stakeholders remained informed as the review progressed. Members of our Executive and Board held employee listening sessions during this time and were able to hear first-hand how employees were feeling about the strategic review and ensured areas of importance highlighted by employees were considered and reflected in the decisions that were made.

The Board and Executive team spent time reviewing the interested bidders to ensure they held similar values to Croda, which was an important factor for the employees moving with the business. The Board considered that under Cargill's ownership, the divested business and our talented, hardworking employees could look forward to a bright future.

Completing the sale in 2022 will enable us to meet our strategic and sustainability objectives, which will be to the advantage of all our stakeholders and support our shared Purpose to use Smart science to Improve Lives™.

Employee engagement

Listening to the Employee Voice

The Board engages directly with employees in several different ways, including 'Town Hall' meetings, both face-to-face and virtual, that incorporate Q&A sessions and by holding smaller listening groups. The Chair has regular one-to-one meetings with employees, as do other Directors whenever practicable.

Regular pulse surveys have been held during the year which focus on specific issues. Recent surveys have gathered employees' views on inclusion, health and safety (including mental health) and culture. The results of these surveys provide invaluable information for the Board to gauge how employees feel on these important topics. For example, it is through such surveys that the Board was able to understand any concerns employees had during the pandemic whilst working from home and in returning to the workplace. These surveys are one input that the Board uses to help guide them in their decision making.

Information on employees is also received at Board meetings through management reports, with people KPIs in the HR report.

Each Director has the opportunity, and is encouraged, to undertake site visits. Whilst face-to-face site visits remained a challenge during 2021 due to travel restrictions, the Board continued to engage with our sites through virtual site visits. These enabled Directors to meet a broad spectrum of employees from different departments. In addition to the Board's virtual strategy day session with the Iberchem team in Spain, two virtual visits were held during the year to Brazil, and China. These included health and safety presentations, town hall and listening groups and strategy presentations from the senior management. Each visit was attended by three Non-Executive Directors and feedback was given at the next Board meeting.

As well as holding virtual site visits, a number of listening group sessions were organised during the year. These sessions covered topics including Croda's response to the pandemic, the Group's strategy, the role of the Board and the Remuneration Committee, our sustainability programme and the effectiveness of the communication across the business. These sessions were used as a sounding board to understand employees' views and opinions for proposals, as well as providing time for employees to discuss other topics which they wanted to bring to the Board's attention. Such sessions are a mechanism to gain diversity of thought as well as enhancing the relationship of the Directors across a wider employee base.

Another employee voice route includes Speak Up reports, a summary of which are provided to the Audit Committee each year, including trends in the types of reports and regions reporters came from.

A significant communications programme was undertaken as part of the sale of the majority of the Performance Technologies and Industrial Chemicals businesses and further information on this can be found on page 69.

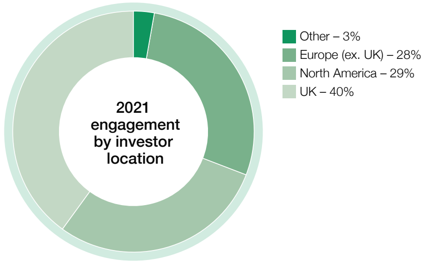
The results and feedback of all the engagement with employees were shared and discussed by the Board. The Board also considers annually if the current framework continues to be effective.

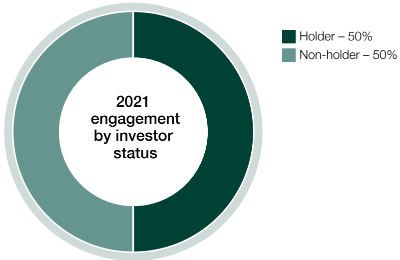
Feedback from 2020 concluded that engagement had been too UK focused and that a wider global voice should be heard. In 2021 the virtual overseas visits in Brazil and China included listening groups and there was global representation in all the other listening groups.

The Board considers that it has meaningful and genuine dialogue with employees and the correct breadth of coverage using the existing mechanisms. Croda is good at engagement and has an open culture. Site visits are valuable and result in candid discussions and the Board are looking forward to recommencing their face-to-face engagement during 2022.

Listening group date	Countries attendees from	Departments attendees from	NED's that participated
January 2021	Global Representation Three sessions – Americas, Asia and Europe	All functions	Helena Ganczakowski
April 2021	Italy (two sessions)	R&D, Sales, Marketing, Logistics	Roberto Cirillo
June 2021	Brazil	All functions	Anita Frew Keith Layden Jacqui Ferguson
June 2021	China	All functions	John Ramsay Roberto Cirillo Helena Ganczakowski
November 2021	Global representation Three sessions – Americas, Asia and Europe	All functions, weighted towards supply chain and operations	Anita Frew

Investor engagement





Approach

The Board is committed to maintaining regular dialogue with investors and communicating in a clear and transparent manner. The investor engagement programme is led by the Investor Relations and Corporate Affairs Director and is a comprehensive programme compromising results events, investor roadshows, attendance at conferences, investor seminars and ad-hoc meetings.

The investor relations programme includes direct Board engagement through the Group Chief Executive and Group Finance Director. The Chair and other Non-Executive Directors also make themselves available to engage on topics such as governance, strategy, ESG performance, remuneration and other relevant topics. This gives the Board insight into investors' views, helping to inform key Board decisions and shape the future direction of the company. The Board is also regularly updated through monthly Board papers, management presentations and feedback from the investor relations team. This extends to commentary on the trading environment and Croda's performance relative to peers.

Our AGM traditionally offers the opportunity for investors to engage directly with the Board and receive an update on business performance. As it was not possible to conduct this in the usual way in 2021 due to COVID-19 restrictions, we hosted a pre-AGM Question and Answer session offering investors the opportunity to engage directly with the Board. Results presentations are webcast live, with a replay facility available on our website, ensuring all investors have equal opportunity to participate in our results presentations. Investors can also sign up to receive regulatory alerts on our website making sure they are notified of any company updates.

In addition to engaging with investors, the Group engages with other key audiences such as analysts and ESG ratings agencies. We typically hold regular analyst calls following results, ensuring all covering analysts have the same opportunity to discuss our results.

Activities during the year

Investor engagement in 2021 was of a hybrid nature, predominantly compromising virtual meetings. Throughout 2021 we met with over 500 investors, covering a balance of both holders and non-holders. This includes all active fund managers among our top 30 shareholders. Over the last two years there has been an increase in engagement with fund managers outside the UK, particularly in the European Union, with the geographic breakdown of the meetings reflecting the global nature of our investor base.

We have continued to see increased engagement around ESG, with investors looking for increased disclosure and transparency. Sustainability is a core part of Croda's strategy and the Group has a well embedded sustainability programme. In March 2021 we hosted a virtual seminar to launch our 2020 sustainability report covering our non-financial performance in 2020 against key metrics and new interim milestones to ensure we achieve our Commitment to be Climate, Land and People positive by 2030. We saw good engagement from a range of audiences, with questions from institutional and private investors, ESG specialists and sell-side analysts. The seminar also led to further engagement with several follow up meetings and questions from investors.

Looking forward to 2022 we will continue to proactively engage with investors with seminars and site visits to provide a better understanding of our business model and investment case.

Commonly asked investor questions

1. What has the impact of raw material inflation been on Croda?

Inflation and price increases have been a key theme throughout the economy in 2021. Croda uses a diverse range of raw materials in production and we have experienced significant cost increases in 2021 averaging approximately 17% in the underlying business. We typically provide critical ingredients into formulations at low concentrations, so the cost of our ingredients in our customers' formulations in comparison to other ingredients is relatively small. As a result, we have broadly managed to pass on raw material cost increases to customers and have not seen any negative impact on our operating margins due to inflation.

2. What is driving the recovery in Consumer Care?

The Consumer Care sector was created at the beginning of 2021 comprising Croda's leading global position in Personal Care and the high-growth Home Care and Iberchem fragrances and flavours businesses. Personal Care sales improved in early 2021, led by a resurgence in Beauty Actives. Sales and demand remained strong throughout the year with a recovery in "going out" sales offsetting a moderation in customer restocking. Consumer Care is a sustainability driven sector and our innovation programme is driving growth as consumers seek 'green, clean and conscious' beauty products.

3. How sustainable is revenue in lipid systems and how will this evolve?

We delivered approximately US$200m of sales of lipid systems in 2021, and expect a similar level of sales in 2022. Lipid drug delivery has significant potential for applications beyond COVID-19 in areas such as gene therapy and oncology. We expect to see an ongoing expansion in the range of applications for lipid systems in vaccines and therapeutic drugs.

4. How will you utilise proceeds from the divestment of the majority of your PTIC operations?

We have a clear capital allocation policy which prioritises organic investment and we see exciting opportunities to invest in new capacity, product innovation and attractive geographic markets to support our growth in Consumer Care and Life Science markets. This organic investment will be complemented by inorganic investment, targeting knowledge intensive businesses in exciting niches that can accelerate our growth. In line with our capital allocation policy, we will continue to make regular returns to shareholders and should we not identify suitable opportunities to deploy capital with our leverage ratio remaining consistently below our targeted range, we would look to return capital to shareholders.

5. How will the divestment of the majority of your PTIC operations impact the progress you are making implementing your sustainability strategy?

We have set out a bold sustainability commitment to be Climate Positive by 2030, and for 75% of our raw materials to be bio-based from 69% today. The operations being divested have a higher bio-based footprint than the Croda average, meaning that on divestment the Group average will fall, but we will retain our 75% target. Conversely, as the divested operations are more energy intensive, on divestment our scope 1 & 2 emissions intensity will fall, so we will re-baseline our carbon reduction targets accordingly. As a result, the divestment and the approach we are adopting to adjusting our targets, will enhance the positive impact of our sustainability strategy overall.

Division of responsibilities

The Board

Chair

The Chair leads the Board and sets the tone from the top promoting a culture of openness and debate and effective communication between the Executive and Non-Executive Directors. She creates an environment at Board meetings in which all Directors are able to contribute to discussions and feel comfortable in engaging in healthy debate and constructive challenge.

Senior Independent Director

The Senior Independent Director provides a sounding board for the Chair and acts as an intermediary for the Non-Executive Directors, where necessary. She is available to shareholders where communication through the Chair or Executive Directors has not been successful or where it may not seem appropriate.

Independent Non-Executive Directors

The role of independent Non-Executive Director is central to an effective and accountable Board structure as they provide strategic and specialist guidance together with effective governance. They constructively challenge the Executive Directors and scrutinise the performance of management in meeting agreed goals and objectives and ensure all stakeholder views are considered.

Non-Independent Non-Executive Director

Having served Croda for 33 years, the latter five of which were as a member of the Board, Keith Layden is not considered independent. However, because of that experience, Keith contributes strongly to the Board's culture and personality, and adds unique and valuable insight and constructive challenge.

Group Chief Executive

The Group Chief Executive has day-to-day responsibility for the effective management of the Group's business and for ensuring that Board decisions are implemented. He plays a key role in devising and reviewing Group strategies for discussion and approval by the Board. The Group Chief Executive is tasked with providing regular reports to the Board.

Group Finance Director

The role of Group Finance Director is to bring a commercial and financial perspective to the boardroom. Working with the Group Chief Executive, he is responsible for the leadership and management of the Company according to the strategic direction set by the Board. He leads the global finance function and oversees the relationship with the investment community.

Group General Counsel and Company Secretary

The Group General Counsel and Company Secretary is secretary to the Board and its Committees. He works closely with the Chair in formulation of meeting agendas and yearly agenda programmes. He ensures that Board procedures are complied with and also advises on regulatory compliance and corporate governance. This role is to support the Chair and the Non-Executive Directors.

Meetings

Membership of the Board and its Committees, and attendance (eligibility) at meetings held during the year ended 31 December 2021

	Board	Nomination Committee	Audit Committee	Remuneration Committee
Anita Frew (Chair)	7 (7) C	4 (4) C		
Roberto Cirillo	7 (7)	4 (4)	6 (6)	6 (6)
Jacqui Ferguson	7 (7)	4 (4)	6 (6)	6 (6)
Steve Foots	7 (7)			
Helena Ganczakowski	7 (7)	4 (4)	6 (6)	6 (6) C
Keith Layden	7 (7)	4 (4)		
Jez Maiden	7 (7)			
John Ramsay	7 (7)	4 (4)	6 (6) C	6 (6)
Julie Kim	3 (3)	1 (1)	1 (1)	2 (2)

C Chair of the Committee

Governance structure

The Board has three main Committees: the Nomination Committee, the Audit Committee, and the Remuneration Committee. The terms of reference for each Board Committee can be found at www.croda.com.

The day-to-day operational management of the Business is delegated by the Board to the Group Chief Executive, who uses several Committees to assist him in this task: the Group Executive Committee; the Group Finance Committee; the Risk Management Committee; the Group Safety, Health, Environment and Quality (SHEQ) Steering Committee; the Group Ethics Committee; and the Sustainability Committee.

Further information on each of the Committees and the membership as at year end is shown below.

Principal Board Committees		
Nomination Committee	Audit Committee	Remuneration Committee
Chaired by Anita Frew	**Chaired by John Ramsay**	**Chaired by Helena Ganczakowski**
Reviews the structure, size and composition of the Board and its Committees, identifies and nominates suitable candidates for appointment to the Board and has responsibility for Board and Executive Committee succession planning. For more information see pages 76 to 77.	Monitors the integrity of the Group's financial statements and announcements, the effectiveness of internal controls and risk management as well as managing the external auditor relationship. For more information see pages 79 to 83.	Recommends the Company's remuneration policy and framework and determines the remuneration packages for members of senior management. For more information see pages 84 to 108.

Group Chief Executive					
Group Executive Committee	Group Finance Committee	Risk Management Committee	Group SHEQ Steering Committee	Group Ethics Committee	Sustainability Committee
Chaired by Steve Foots	**Chaired by Steve Foots**	**Chaired by Jez Maiden**	**Chaired by Mark Robinson**	**Chaired by Tom Brophy**	**Chaired by Phil Ruxton**
The Committee met 12 times in 2021 and is responsible for: developing and implementing strategy, operational plans, policies, procedures and budgets; monitoring operational and financial performance; assessing and controlling risk; and prioritising and allocating resources	The Committee met 11 times in 2021 to review monthly operating results and examine capital expenditure projects. The Finance Director, President of Global Operations, President of Regional Operations, Chief Scientific Officer and Group Financial Controller also attend.	The Committee meets quarterly to evaluate and propose policies and monitor processes to control business, operational and compliance risks faced by the Group, and to assess emerging risks. Three Executive Committee members attend as well as the Group Financial Controller and VP Risk and Assurance.	The Committee meets quarterly to monitor progress against the Group safety, health, environment and quality objectives and targets, review safety performance and audits, and determine the requirement for new or revised SHEQ policies, procedures and objectives. The Chief Executive and four Executive members attend. The VP Risk and Assurance also attends.	The Committee meets quarterly in support of our culture of integrity, honesty and openness, and to promote the importance of ethics and compliance across the Group and amongst our supply chain partners. It comprises three Executive Committee members. The VP Risk and Assurance also attends.	The Committee met five times in 2021 to further develop the Group sustainability strategy, to embed sustainability practices throughout the organisation and to monitor progress towards achieving our Commitment. It comprises a diverse group of leaders representing all aspects of our business, including four Executive Committee members. Each Committee member is the champion for one or more of the KPIs in our Commitment.

Composition, succession & evaluation

Board support

Each Director has access to the advice and services of the Company Secretary. Where necessary, the Directors may take independent professional advice at the Company's expense. Papers are made available electronically one week in advance of meetings, which ensures that each Director has the time and resources to fulfil their duties. A resource centre within the web portal provides access to useful information about the Group, including corporate governance materials, finance and strategy information, Group policies and procedures, and information on topics such as risk and insurance. In order to build and increase the Non-Executive Directors' familiarity with, and understanding of, the Group's people, businesses and markets, senior managers regularly make presentations at Board meetings. Their understanding of the Group's operations is enhanced by regular business presentations and site visits whenever possible. At induction, and as requirements change, training is provided on governance, legal and regulatory matters. Online training is provided on competition law and anti-bribery and corruption. Specific training is provided when requested by the Directors. To remain up-to-date with wider issues the Directors are encouraged to participate in events hosted by external organisations to develop broader perspectives.

Conflicts of interest

A well-established process is in place whereby the Board regularly reviews and monitors potential conflicts of interests. Under the Company's Articles of Association, the non-conflicted Board members have authority to authorise a conflict or potential conflict of interest.

Directors holding significant commitments outside of the Company are required to disclose them prior to appointment and on an ongoing basis when there are any changes. Actual and potential conflicts of interest are included on a register which is maintained by the Company Secretary and reviewed annually.

During the appointment process for the two new Non-Executive Directors, the candidate's other commitments were taken into account, in addition to whether or not a conflict or potential conflict would exist. In each case it was agreed that no potential conflict existed.

Details of the professional commitments of the Chair and the Non-Executive Directors are included in their biographies on pages 62 to 63. The Board is satisfied that these do not interfere or conflict with the performance of their duties for the Company.

Independence of Non-Executive Directors

Croda complies with the Financial Reporting Council's Reporting Code in having experienced Non-Executive Directors who represent a source of advice, strong judgement and challenge to the Executive Directors. At present there are eight such Directors, including the Chair and the Senior Independent Director, each of whom has significant commercial experience. Details of their experience is on pages 62 to 63.

The independence of the Non-Executive Directors is kept under review to ensure continuing independence and objective judgement. The Chair was independent upon her appointment in 2015 and both the Chair as head of the Board and the Chief Executive as head of executive management have clearly defined roles. Further information on their roles is included on page 72. With the exception of Keith Layden, the Board considers that all Non-Executive Directors who served during the year are independent in character and judgement, with no relationships or circumstances that are likely to affect, or could appear to affect, their judgement. Keith Layden is not considered independent, having served as the Company's Chief Technology Officer prior to retirement from the Company and appointment as a Non-Executive Director in May 2017.

Board evaluation

Following the previous years' external evaluation, the 2021 Board evaluation was conducted using questionnaires and reports facilitated by Lindstock. The questionnaires were developed by the Company Secretary and were set in consideration of the strategy and in line with best governance practice. These questionnaires were issued to the Board members, senior leaders and key advisors who regularly attend the Board and Committee meetings. Responses were on an anonymous basis. Lindstock collated the responses and prepared reports that summarised the findings and outlined key areas for discussion. The reports were then discussed at the Board and Committee meetings.

Evaluation outcomes

The Board's size, range of skills, experience and level of diversity were rated highly. International diversity had been improved through the recent Board appointments. The value of further life sciences, consumer care and sustainability experience would be considered when the process for the succession of the Chair and the Senior Independent Director commenced.

The Board's testing and development of the strategy was rated highly overall as were the monitoring KPIs provided to the Board. The understanding of the company's performance relative to competitors was identified as an area for continued review.

The Board's understanding of the views of major investors and stakeholders was rated highly. The Board's monitoring of culture was also rated highly, but it was concluded that there was always scope for even greater focus on this area.

The relationships amongst individual Board members and between the Board and management were rated very effective, as was the Board's relationship with the Chief Executive.

The Board's monitoring of the Company's health and safety performance was rated highly as was its understanding of the likelihood and impact of key risks. The Board's risk appetite was seen to be appropriate. The evaluation emphasised the need to continue to review past decisions to ensure learnings were incorporated into future decision making.

The Board will agree areas for improvement and monitoring. The progress in the key focus areas for 2021 can be found on page 67.

The Senior Independent Director met with the Chair to provide feedback on her performance following discussions with the other Non-Executive Directors and the Executive management to gather their views. It was agreed that the Chair was highly engaged and dedicated to her role. She creates a culture of trust, openness and debate, facilitating an atmosphere of challenge whilst encouraging the effective contribution of all Board members.

The Chair met and provided feedback to each Non-Executive Director and the Executive Directors. Following these discussions, the Chair was satisfied that all the Directors continued to be effective and demonstrate commitment to the role, including having time to attend all necessary meetings and to carry out all their duties.

Board re-election

Following the individual performance assessments, the Board is satisfied that each Director continues to perform effectively, allocates sufficient time for their duties and remains fully committed to their role. Full biographies for the Directors are on pages 62 and 63.

The terms and conditions of appointment of Non-Executive Directors can be viewed at www.croda.com. Contracts for Executive and Non-Executive Directors can be inspected during normal business hours at the Company's registered office by contacting the Company Secretary and will also be available for inspection at the AGM.

The Directors will be proposed for election and re-election at the AGM on 20 May 2022 and details are in the Notice of Meeting.

Appointment of Non-Executive Directors

Background

At the start of the year the Nomination Committee considered the composition of the Board and concluded that additional Health Care experience at Board level would be beneficial for the Company. In addition, the Committee recognised the benefit and value of having an even greater diversity on the Board, which had been a theme identified through the 2020 external board evaluation. As a result, the Committee concluded that a search for additional Non-Executive Directors should be undertaken and agreed to commence the recruitment process.

Nomination Committee process

1. Search firm selection

A sub-committee of the Nomination Committee, including the Chair, Chief Executive and Senior Non-Executive Director engaged with five search firms and met with each firm over two days with the aim of choosing one to recommend to the Nomination Committee. It was a requirement that the executive search firm must have signed up to the Voluntary Code of Conduct for Executive Search Firms. A key element of the search was to identify a firm that had deep understanding of the Life Sciences sector, and in particular Health Care. In addition, it was essential that the search firm could demonstrate they would be able to produce a longlist of candidates that were gender balanced and weighted towards ethnically diverse candidates. MWM Consulting was appointed following the tender process.

2. NED specification

The Committee was asked to consider and approve a specification for the new Non-Executive position.

The specification included key essential and desirable experience for the role. These included experience of desired markets, fast-paced change, emerging markets and industries where health and safety had been paramount. The specification also included personal qualities and specific attributes aligned to Croda's culture, values and behaviours.

3. Stages of the selection process

Following selection of the search firm a candidate long list was identified by the end of March 2021. All the Committee received the long list and were able to provide feedback. A short list was identified by a sub-committee including the Chair, Chief Executive and Senior Non-Executive Director and interviews were conducted in April and May 2021.

a. First interview - The Chair and Chief Executive interviewed the short listed candidates separately and the Senior Non-Executive Director supported by another NED also interviewed candidates together. Two candidates were progressed through to the second interview stage.

b. Second interviews - All Committee members and the Company Secretary then met with the two final candidates. This stage included discussions around their interest in the role, current time commitments and any potential conflicts of interest.

c. Appointment - The sub-committee of the Nomination Committee met and, having reviewed the feedback, and the skills sets of the candidates against the candidate specification and skills matrix, concluded that an offer be extended to both candidates, increasing the size of the Board from eight to 10 Directors. Julie Kim joined the Board on 1 September 2021 and Nawal Owzen on the 1 February 2022. Their biographies can be found on page 63.

Stakeholder considerations.

Strategy – Appointing Board members with Health Care business experience, experience of fast-paced change and emerging markets supports the delivery of the Croda strategy and the long-term success of the business. Further information on the strategy can be found on pages 20 and 21. The appointments will also bring in-depth understanding of a wide of stakeholders.

Values – The new Non-Executive Directors appointed have the skills and behaviours that will provide a constructive and empathetic approach, the ability to promote the culture and Croda's sustainability ethos alongside their considerable professional experience.

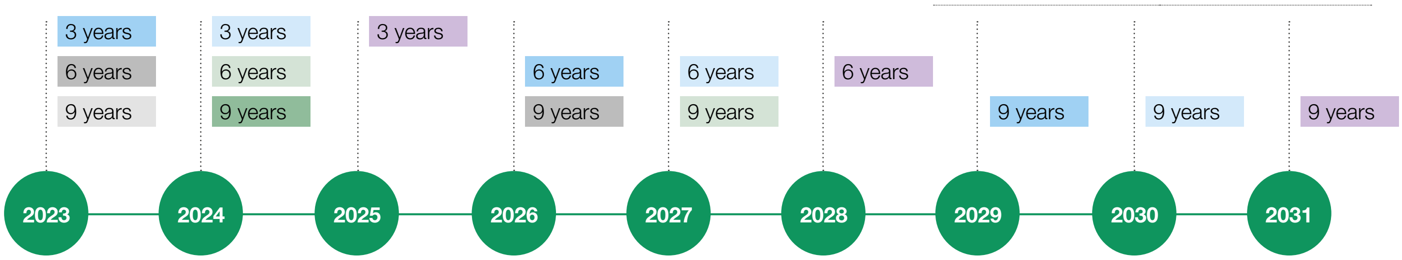
Diversity – The new appointments increase the diversity of the Board, including gender, ethnicity, nationality and tenure. Different views bring broader debate and can lead to better decisions, which reflect the concerns of all the stakeholders and lead to greater commercial success.

Non-Executive Directors' Tenure

The Committee reviews the tenure and succession plans for the Non-Executive Directors' tenure annually. The focus in 2022 will be on the on the succession for Helena Ganczakowski's and her roles as Senior Independent Non-Executive Director and Chair of the Remuneration Committee. This work will commence early in 2022.

Key

John Ramsay	Anita Frew
Julie Kim	Jacqui Ferguson
Keith Layden	Roberto Cirillo
Helena Ganczakowski	Nawal Ouzren



Report of the Nomination Committee

for the year ended 31 December 2021

> **Having a diverse and talented group of people at all levels of Croda is essential for delivering success.**

Anita Frew
Chair

Nomination Committee Overview

Responsibilities

The Committee is responsible for nominating candidates for appointment to the Board for approval by the Board, and for succession planning. It evaluates the balance of skills, knowledge, experience and diversity on the Board.

Key responsibilities

- To regularly review the structure, size and composition, including the skills, knowledge, experience and diversity, of the Board and make recommendations for any changes to the Board
- To give full consideration to succession planning for Directors and other senior Executives, taking into account the challenges and opportunities facing the Company and, consequently, what skills and expertise the Board will need in the future
- Where a Board vacancy is identified, to evaluate the balance of skills, knowledge, experience and diversity on the Board, and prepare a description of the role and capabilities required for the respective appointment
- To identify and nominate candidates to fill Board vacancies, for the approval of the Board, as and when openings arise
- To keep the organisation's leadership needs, both Executive and Non-Executive, under review to ensure that the Company continues to compete effectively in the marketplace
- To review annually the time required from a Non-Executive Director and the Chair
- To make recommendations on succession planning for the Board

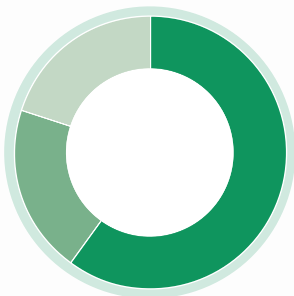
The Committee's terms of reference are reviewed annually and they can be found in the governance section at www.croda.com

Details of attendance at the meetings during the course of the year can be found on page 72. **When it is appropriate to do so members of the Executive Committee attend the meetings on request of the Chair of the Committee.**

Key Focus Areas

- Board appointments – Reviewed the updated NED skills/experience assessment and led the recruitment process for two new Non-Executive Directors
- Succession planning – Assessed the changes to the Executive Committee and senior leadership teams
- Governance – Ensured compliance with key governance issues

Time allocation



Key

Board – 60%	
Succession – 20%	
Governance – 20%	

Dear fellow shareholder,

I am pleased to present the Nomination Committee report for the year ended December 2021.

Main activities and priorities in 2021

Board changes

Each year the Nomination Committee considers the composition of the Board and in terms of the balance of skills, experience, length of service and wider diversity considerations. The Guidance on Board effectiveness comments that boards are more likely to make good decisions and maximise opportunities for long-term success if their members collectively have the right balance of skills, experience, knowledge and independence.

As a result of this review early in 2021,and following a comprehensive recruitment process, two new appointments have been made to the Board and details of the activities undertaken by the Committee in relation to these appointments are outlined on page 75.

On 1 September 2021, Julie Kim was appointed as a Non-Executive Director, bringing 25 years' experience of health care markets across Europe, Asia and Latin America. Julie is currently President of Plasma-Derived Therapies at Takeda Pharmaceutical, a global, R&D driven biopharmaceuticals company. Then on 1 February 2022, we also welcomed Nawal Ouzren, currently CEO of biopharmaceutical company Sensorion, to the Board, adding further health care expertise through her first-hand experience of biologics and novel gene therapies.

Both appointments add relevant experience as we look to access higher growth markets in Health Care, and in regions beyond Europe and North America. They also bring even greater diversity to the Board in terms of gender, ethnicity and nationality. I am pleased to have fulfilled our commitment to meeting the requirements of the Parker Review on ethnic diversity and achieving full gender balance on the Board in line with the Hampton-Alexander Review. Our Board diversity policy seeks to maintain this position going forward.

Helena Ganczakowski's and my own appointment were considered by the Committee and both terms were extended by another year in line with the Nomination Committee policy that once a Non-Executive Director has served six years, any extension to their term would be on a year-by-year basis. Roberto Cirillo and Jacqui Ferguson having completed their first three year terms, were also reappointed for a further three years.

Diversity and inclusion

Having a diverse and talented group of people at all levels of Croda is essential for delivering success. The Board supports the recommendations of the Hampton-Alexander and Parker Reviews in relation to gender and ethnic diversity. I am pleased that we have now achieved a position of 50% of women on the Board (including female Directors as Chair and Senior Independent Director) and our new appointments to the Board fulfil the requirements of the Parker Review.

The gender balance on Executive Committee and senior management teams (direct reports to the Executive Committee) by 31 December 2021 stood at 36 % female. We continued to increase the diversity of our leaders below Board and Executive Committee level. 27% of our Top 56 employees are female, with the Top 56 made up of employees across eleven nationalities. There continues to be work to do to create further diversity and the gender balance in the underlying management teams and this will take a number of years.

Further information on our current people initiatives and diversity and inclusion and our ambitions in these areas can be found on pages 36 and 37 of this report. The Committee and the Board receives reports from the Group HR Director on these initiatives throughout the year. Members of the senior management team and potential future leaders are given the opportunity to present to the Board whenever the opportunity arises.

A copy of our Board Diversity Policy, which is regularly reviewed by the Board, is available in the corporate governance section at www.croda.com. For more information on our Board see the Directors Biographies on pages 62 and 63.

Succession planning

The Committee, supported by HR, reviewed the development plans for the Board and each Executive Committee member. They also reviewed the talent and succession planning within the Group. Succession plans for sector, region and function, and the plan to improve female talent in senior positions are all well established.

Following the changes made in 2020 to the Executive Committee structure, a further review was undertaken in advance of the departure of Maarten Heybroek, President Consumer Care and the retirement of Stuart Arnott, President of Sustainability to ensure we could continue to deliver our ambitious strategy.

Following an external search conducted by Egon Zehnder, Daniele Piergentilli was appointed to the role of President of Life Sciences. Daniele's appointment strengthens Croda's ability to take advantage of the opportunities in Life Sciences which is in line with our strategy. Daniele has a strong background in Health Care at BASF, where he worked for 23 years in a number of sales, marketing and R&D roles.

David Shannon, who was Senior VP North America was appointed to the role of President Consumer Care. David has been with Croda for 24 years working in both regional and sector roles in Personal Care, Health Care and Crop Care. He has deep customer knowledge and a network of close relationships across Croda. David was appointed following an open internal process.

The opportunity was also taken to strengthen the Sustainability team to further support our strong strategic commitment to sustainability. Phil Ruxton (Vice President Sustainability) was appointed as Chief Sustainability Officer reporting into Nick Challoner, Chief Scientific Officer.

All these changes were proactively planned and managed and contributions from all these individuals can be found throughout this report.

Director induction

The Company provides new Directors with a comprehensive and tailored induction process. One of the first sessions attended is a health and safety briefing, and the induction schedule includes meetings with members of the Board and Executive Committee, meetings with key senior managers and the Group's audit partner and other key advisers. Induction programmes are developed by the Group's Company Secretarial department and discussions start well in advance of the appointment date to tailor the experience to the existing knowledge and experience. New Directors are provided with external training that addresses their role and duties as a Director of a quoted public company.

All new Directors are given access to our electronic Board papers which provide easy and immediate access to key documents including the previous twelve month's Board and Committee papers, recent reports from the external Auditor; the Group's risk register and Schedule of Principal Risks; the latest budget and strategic plan; recent sell-side analyst reports and feedback from our stakeholder engagement programmes; information on our sustainability initiatives and matters reserved for the Board and the Committee terms of reference and other key policies. This information is supplemented by country and site tours and we expect these to recommence in 2022.

Other activities of the Committee

The Committee reviewed the time commitment of the Non-Executive Directors. This is assessed before appointment and on an annual basis. During the year, I became a Non-Executive Director and Chair of Rolls-Royce Holdings Plc. Since the year end John Ramsay had been appointed as a Non-Executive Director of Babcock International Group Plc. The Committee considered each appointment and concluded that these appointments would not impact on our commitment and availability to Croda. It was satisfied that all the Non-Executive Directors remain able to commit the required time for the proper performance of their duties.

The Committee considered and concluded that, except for Keith Layden, all Non-Executive Directors continue to fulfil the criteria of independence. As Keith was formerly an Executive Director of the Company, he is not currently considered to be independent.

The annual Committee evaluation was conducted using questionnaires considering the Committee's operations, oversight and progress during the year. The evaluation confirmed that the Committee continued to be well led and excellent progress had been made with the Board appointments during the year. Positive progress had been made developing talent and increasing gender balance. Going forward the oversight on diversity and inclusion needed to be maintained and monitored.

Anita Frew
Chair of the Nomination Committee

Audit, risk and internal control

Fair, balanced and understandable

To assist the Board in determining whether the Annual Report was fair, balanced and understandable, the annual report team prepared a Board paper that, amongst other things, reviewed the process of preparation of the report, the controls in place to ensure consistency and reliability of the underlying information, identified the material positive and negative matters referred to in the report to ensure balanced content and provided details of the level of senior level oversight of the content of the report.

The Annual Report and Accounts process is designed to give the Board enough time to assess whether it is fair, balanced and understandable, as required by the Code. The key themes and messages to be included in the Annual Report and Accounts are considered by the Board early in the process.

The Board considered whether the Annual Report and Accounts contained the necessary information for shareholders to assess the Company's position and performance, business model and strategy. The Directors received a full draft of the Annual Report and provided feedback. This review ensures that each Director has an opportunity to highlight any areas requiring further clarity as well as suggesting issues and areas that were not adequately covered or on which the report may have placed too much emphasis.

The key messages in the narrative in the Strategic Report and Governance sections of the Annual Report and Accounts were reviewed to ensure they were consistent with the financial reporting contained in the financial statements. The Board believed that clear explanations had been provided for the KPIs.

The Board reviewed whether the Annual Report and Accounts disclosed the successes and the challenges that had been faced in the period and that the narrative and analysis effectively balanced the information needs and interests of each of our key stakeholder groups. In particular the Board considered if the explanation of the impact of COVID-19 and the additional sustainability disclosures included this year had any impact on the balance and clarity of the Annual Report and Accounts.

The framework and layout were considered to be clear and coherent, with a consistent tone throughout and clearly signposted linkage between all sections, in a manner that reflected a comprehensive narrative and highlighted the key messages appropriately throughout.

Following this assessment, the Board was of the opinion that the 2021 Annual Report and Accounts are representative of the year and present a fair, balanced and understandable overview, providing the necessary information for shareholders to assess the Group's position, performance, business model and strategy.

A full statement of Directors' responsibilities can be found on page 111.

Risk management and internal control

The Board acknowledges its responsibility for ensuring the maintenance of a sound system of internal controls and risk management, in accordance with the guidance set out in the Financial Reporting Council's Guidance on Risk Management, Internal Control and Related Financial Business reporting 2014, and in the Corporate Governance Code itself.

Executive management have established an organisational structure with clear operating procedures, lines of responsibility and delegated authority which was reviewed by the Board (page 73). In particular, there are clear procedures and defined authorities for the following:

Financial reporting and financial statements review

Policies and procedures governing the financial reporting process and preparation of the financial statements are owned by the Group Finance Director and clearly and transparently communicated through the Group Policies system. In order to assess the financial statements, the Audit Committee regularly reviews reports from members of the finance team and external audit who are invited to attend the Committee's meetings. When conducting its review the Committee considers material accounting assumptions and estimates made by management, any significant judgements or key audit matters identified by the external auditor (pages 113 to 114 Auditor report), compliance with relevant accounting standards and other regulatory reporting requirements, including the UK Corporate Governance code, and the accounting policies and procedures applied (see page 80 Audit Committee report).

Internal audit function

The internal audit function is a key element of the Group's corporate governance framework. Its role is to provide independent and objective assurance, advice and insight on governance, risk management and internal controls to the Board and Audit Committee and the Group. It supports the Group's strategy and objectives by evaluating and assessing the effectiveness of risk management systems, business policies and procedures, system and key internal controls. In reporting on their reviews, internal audit makes recommendations to address issues and improve processes. Once recommendations are agreed with management, the internal audit function monitors their implementation and reports to the Audit Committee on progress at every meeting. See page 81 Audit Committee report.

Capital investment

The Finance Committee (a subcommittee of the Executive Committee) operate a clearly defined capital expenditure process including detailed business plan appraisal, risk analysis and authorisation. The Global Capital Project Director has developed a framework for managing major capital expenditure, and post-investment review processes are completed by internal audit (at the Audit Committee's request).

Business risk management

As described on page 50 the Executive Committee has established an ongoing process for identifying, evaluating and managing emerging and principal risks. The Board receives updates on principal risks and risk appetite on an annual basis (page 66) and the Audit Committee receives reports from internal audit on the effectiveness of mitigating controls in place over selected principal risks at each meeting. The Risk Management steering group, a subcommittee of the Executive Committee (page 73), meets on a quarterly basis to monitor and review both current and emerging risks.

Internal Controls

There is a documented framework of required internal controls for business processes, IT, safety and quality, which form part of our 'business as usual' activities and which are documented in controls manuals. Policies governing the internal controls are documented in the Group Policies system, which is available online to all employees, and each group policy is owned by a member of the Executive Committee. Confirmation that the controls are being adhered to is the responsibility of managers, who together with their teams complete an annual self-assessment process against all controls which provides a snapshot of the control environment at the start of the year. Compliance with controls is tested by the internal audit team as part of their annual plan of work approved by the Audit Committee each year (page 81), as well as being tested by other internal assurance providers.

The Board discharged its responsibility for monitoring the operational effectiveness of the internal control and risk management systems throughout the year using a process which involved:

- Delegation of review of systems of risk management and internal control to the Audit Committee, whose activities are described in detail on pages 80 to 81
- Receipt of written confirmations from senior management
- Board review of the report on significant control weaknesses (page 66)
- Annual review of risk appetite statements and principal risks (page 51)

These processes have been in place for the full financial year up to the date on which the financial statements were approved by the Board. The systems are designed to mitigate, rather than eliminate, the risk of failure to achieve business objectives and provide reasonable, but not absolute, assurance against material misstatement or loss.

Report of the Audit Committee
for the year ended 31 December 2021

> The ongoing pandemic has meant that the financial reporting and audit process had to continue to adapt, reflecting the lessons learnt from the 2020 audit process.

John Ramsay
Chair of the Audit Committee

Audit Committee Overview

Responsibilities

The Committee assists the Board in ensuring that the Group's financial systems provide accurate and up-to-date information on its financial position.

Key responsibilities

- To monitor the integrity of the financial statements and results announcements of the Group and to review significant financial reporting issues and judgements.
- To recommend external auditor appointment and removal, assess audit quality, negotiate and approve the audit fee, assess independence, monitor non-audit services and be responsible for audit tendering.
- To review the adequacy and effectiveness of the Group's internal controls and risk management systems, and the adequacy, effectiveness and output of the internal audit function.
- To review the adequacy of the Group's whistleblowing arrangements and procedures for detecting fraud.

Detailed responsibilities are set out in the Committee's Terms of Reference which are reviewed regularly. They can be found in the governance section at
www.croda.com

Time allocation

Key

Financial reporting – 25%
Governance – 15%
External audit – 25%
Internal audit and risk management – 25%
Specific focus areas for 2021 – 10%

Details of attendance at the meetings during the year
P72

Details of the key focus areas for 2022
P81

Key focus areas in 2021

- Maintained our focus on cyber security improvement: Reviewed the workplan of the recently appointed Information Security Manager and assessed the adequacy of proposed control improvements.
- Monitored Avanti and Iberchem integration programmes. Reviewed the integration of Avanti and Iberchem and the adequacy of internal controls in relation to Croda standards.
- Reviewed the improved controls and assurance standards in relation to the project management of major capital projects.
- Assessed the impact of regulatory change on Croda's risk and control framework. Reviewed the Government consultation white paper on Audit Reform and submitted comments on proposals as well as initial consideration of the Group's preparedness for the major proposals.
- Oversaw the onboarding and effectiveness of the new external audit partner.

Report of the Audit Committee for the year ended 31 December 2021

I am pleased to present the Audit Committee report for the year ended 31 December 2021. This report provides shareholders with an overview of the work undertaken by the Committee and the key areas considered when discharging its responsibilities and providing assurance on the integrity of the annual report and financial statements for the year ended 31 December 2021.

The ongoing pandemic has meant that the financial reporting and audit process had to continue to adapt, reflecting the lessons learnt from the 2020 audit process. The majority of the external audit has again been delivered remotely, while more of the internal audit programme was delivered in-person. I received regular updates from the Group Finance Director, the wider global finance team, the Lead Audit Partner and the VP Risk and Assurance. The dedication and commitment from the Croda executive management team, the audit teams and Croda employees has been exceptional and robust audit processes were delivered once again.

Committee membership and attendance

The composition of the Committee at the end of the year comprised of five independent Non-Executive Directors. Julie Kim joined the Board and Committee on 1 September 2021 and post year end Nawal Ouzren was appointed to the Board and Committee on 1 February 2022. The experience of each Board member is outlined on pages 62 and 63. The Board considers all members of the Audit Committee have the appropriate and relevant level of experience in financial matters as well as a diverse and broad range of competence relevant to the sector focus and the future strategic direction of the Group.

These skills and my own experience of over 30 years in international finance and extensive experience as an audit committee chair provides the Board with assurance that the Committee has the appropriate skills and breadth and depth of experience to ensure that it can be fully effective. It also meets the Code requirements that at least one member has significant, recent and relevant financial experience.

The Chair of the Board, Keith Layden (a Non-Executive Director), the Group Chief Executive, the Group Finance Director, the Group Financial Controller, the VP Risk and Assurance (who leads the internal audit function) and representatives from the external and internal auditors attend the meetings by invitation.

The Committee met on six occasions during the year and has met twice since the financial year end. The meetings were held in advance of the Board and I then provided a report of the key matters that were discussed and any emerging areas that may require additional focus. A programme of business is agreed at the start of the year and it is reviewed and updated to ensure any additional focus areas identified are considered.

To ensure the work of the Committee remains focused on the key and emerging issues, I regularly meet and speak separately with the Group Finance Director, Group Financial Controller, the VP Risk and Assurance and the internal and external auditors. Meetings without the Executive present are also held with the internal and external auditors to facilitate open dialogue and assurance. Before each Audit Committee meeting, I also meet with the external auditors, the Group Finance Director, the Group Financial Controller and the VP Risk and Assurance to discuss control and compliance issues generally and specifically the detail of the year end and half year results, accounting judgements and disclosures. This helps me to ensure there is a shared understanding of the key issues, technical matters and judgements and to make sure sufficient time is devoted to them at the meetings.

Committee evaluation

The Committee performance was assessed as part of the internal annual Board evaluation process (see page 74 for further detail on the process). The output of the evaluation was considered by the Committee in January 2022.

The effectiveness with which the Audit Committee uses its time was rated very highly with all agenda items being covered with appropriate time allowed for more in-depth discussion when required. The Chair was seen to demonstrate effective leadership and rated highly in ensuring all opinions are heard and considered.

Relationships between the Committee and Croda management were considered very effective with the Audit Committee providing both support and challenge. Following the rotation of KPMG's lead audit partner at the start of 2021 due to an organisation change in KPMG, the Committee was satisfied that the leadership of the global audit continued to be effective. Proactive engagement by the lead audit partner during Committee meetings was, however, encouraged to ensure appropriate input and challenge was given during the Committee's deliberations and discussions, particularly in areas of financial reporting issues and judgements.

Agenda coverage through the year was seen as full and appropriate. Committee members were well prepared for meetings, engendering informed discussions and constructive debate. Overall, the evaluation concluded that the Committee was operating effectively.

Four focus areas for 2022 were identified and these are summarised on page 81.

Committee activity in 2021

The Committee's main business as usual activities, as well as the focus areas, and an estimate of the proportion of time spent on them, are detailed below.

Financial reporting (25%)

The Committee:

- Monitored the Group's financial statements and results announcements, including the Annual Report and the interim statement, and with support from the external auditors, reviewed those items in the Group's financial statements that had the potential to significantly impact reporting. The Committee challenged management on the statements and was satisfied with the explanations provided. Consideration was given to the appropriateness of accounting policies, critical accounting judgements and key sources of estimation of uncertainty. Recommendations were made to the Board, supporting the half and full-year accounts and financial statements.
- Reviewed the Group's external reporting framework and use of Alternate Performance Measures (APMs) to assess ongoing appropriateness. The Committee was satisfied that the APM's reviewed were consistent with market practice of both the peer group and the wider FTSE 100 companies, and that disclosure and reconciliation to statutory measures was appropriate.
- In conjunction with the Board, reviewed the financial modelling and stress testing conducted for the going concern assessment. A recommendation was made to the Board to support the going concern statement. Further information can be found on page 125.
- Reviewed the viability assessment process undertaken in support of the long-term viability statement, based on plausible scenarios arising from key risks and their impact on headroom and debt covenants. The Committee challenged the assumptions and scenarios noting the effect they would have during the viability period. Further information can be found on pages 56 to 57.
- Undertook regular reviews of the Group's litigation. The Committee receives reports twice a year from the Group General Counsel

and Company Secretary and was satisfied with the approach to provisioning and disclosure.
- Reviewed the accounting treatment for the disposal of the majority of the PTIC business. The Committee was supportive of the approach adopted.

Governance (15%)

The Committee:
- Reviewed the input from a compliance review to ensure the Committee met its corporate governance and regulatory requirements. The Committee concluded that the requirements were being met.
- Reviewed the effectiveness of the Group's anti-bribery and fraud procedures, including those for whistleblowing. The Committee received a report on the independent investigations that had been conducted in response to concerns raised under the whistleblowing policy and were satisfied with the outcome, including follow-up actions.
- Undertook an external evaluation of the Committee's effectiveness. Information on the evaluation process can be found on page 74. The results of the review concluded that the Committee continued to be effective.
- Reviewed and took account of the annual FRC letter to Audit Committee Chairs.
- Reviewed the Committee's terms of reference and confirmed that the role and responsibilities of the Committee are aligned with the UK Corporate Governance Code. No changes were made during the year.
- Completed its annual review of the Group's tax compliance policy and risks relating thereto. No significant updates were required. The policy is available at www.croda.com.

External audit (25%)

The Committee:
- Discussed and approved the external audit plan, including the assessment of significant audit risks; the engagement risk profile; the use of data analytics; the scope of the audit; the impact of COVID-19; the materiality level and the de minimis reporting threshold; the co-ordination of external audits; and the key members of the engagement team. The Committee monitored the progress made by the statutory audit team against the agreed plan and discussed issues as they arose.
- Discussed increases to the audit fee to reflect expansion of the Group through acquisition, regulatory changes to the requirements for UK managed audits, any additional work due to COVID-19 and increased staff costs within the audit profession. Information on the audit fees can be found in note 3 on page 134.
- Reviewed a project to develop further the IT control environment.
- Met with the external auditors without management present. The Committee considered KPMG's views. There were no significant issues to report.
- Considered the independence and objectivity of KPMG. The Committee confirmed the independence of KPMG as further described on page 83.
- Considered the effectiveness of the external audit process including the onboarding of the new audit partner. The Committee concluded that the audit was effective and a recommendation was made to the Board on the reappointment of KPMG at the AGM.

Internal audit and risk management (25%)

The Committee:
- Reviewed the strategic internal audit planning approach, reviewed reports on the work of the internal audit function from the VP Risk and Assurance and monitored compliance with the Group risk assurance programme. The Committee approved the internal audit plan and the implementation of any resulting actions by management.
- Discussed the use of data analytics as an integral part of the internal audits delivered by the co-source internal audit provider, PwC. The Committee reviewed the potential use of such data analytics in continuous controls monitoring.
- Discussed the results of the 2021 controls assurance internal audits delivered by PwC. The Committee considered the adequacy of management's response to matters raised and the timeliness in resolving such matters.
- Received updates on the IT control environment in-depth review undertaken by management, and the Governance Project which covered risk assessment, a control framework review and refresh and governance. The Committee considered the management action that had been undertaken to address specific control recommendations during the year. Internal audit reported into the Committee on the progress achieved during 2021.
- Assisted the Board in its assessment of the Group's emerging and principal risks. The Committee challenged the results of the 2021 risk assurance activity carried out by internal audit and considered any additional key risks as a result of acquisitions during the year.
- Received a deep dive review from the recently appointed Information Security Manager on the cyber security framework and strategy. The Committee was satisfied with the progress made to date and the steps forward that had been identified. Management were tasked with providing regular updates on progress throughout 2022, together with implementing comprehensive KPIs.
- Reviewed and approved the 2022 internal audit plan and scope of the peer reviews. The Committee approved the plan.
- Met with the internal auditors without management present. There were no significant issues identified.
- Conducted its annual review of the effectiveness of the Group's internal audit function. The Committee concluded that the internal audit team, supported by PwC resource was effective.

Looking ahead to 2022

In addition to our routine business, the Committee has four focus areas for 2022. We will:

1. Maintain focus on cyber security and the delivery of projects identified in the 2021 information security strategy
2. Monitor progress in the development of processes and controls over the reporting of non-financial KPIs, particularly relating to sustainability
3. Monitor the impact of major business change programmes on Croda's risk and control environment
4. Review management's oversight and monitoring of quality controls within the Health Care sector

Report of the Audit Committee (continued)

for the year ended 31 December 2021

Specific focus areas for 2021 (10%)

As highlighted above, the Audit Committee has delivered on our 'business as usual' work, as set out in our terms of reference.

In addition, last year we noted four specific focus areas for 2021, which absorbed the balance of the Committee's time.

Specific focus area	Actions during the year	Progress
Maintain our focus on cyber security with a refreshed rolling annual assurance programme based on the NIST security framework	The information security manager attended the November 2021 committee meeting to present his refreshed strategy, which is aligned with the NIST framework. This identified 12 tactical and 12 strategic projects which will continue to progress through 2022. Internal audit reviewed the risks and controls over the asset management and third party supplier management processes as part of the rolling annual assurance plan.	Moved to BAU rolling assurance process
Monitor Avanti and Iberchem integration programmes, including controls assessment against Croda risk and control standards	Facilitated risk reviews were undertaken with the Avanti and Iberchem leadership teams using the Croda risk management framework (see pages 50 to 52) and the risks were captured in the Digital Hive. Gap analysis of controls in operation at Avanti and Iberchem were completed by internal audit against the Croda controls frameworks and actions were discussed with management to define a plan to full compliance and integration.	Completed
Review the major capital projects assurance programme	A capital programme director was appointed during 2021 and a capital projects framework developed with comments from the internal audit's review being incorporated into the finalised document. A rolling internal audit programme of major capital projects was implemented with findings discussed with the Audit Committee. The programme of audits planned for 2022 was agreed to include five major in-flight project reviews.	Moved to rolling assurance process
Assess the impact of anticipated regulatory changes on Croda's risk and control framework	The Audit Committee considered management's response to the BEIS UK corporate governance reform white-paper and the Group's response to the public consultation. Management undertook four self assessment benchmarking reviews with EY to identify any significant gaps in the current control frameworks and actions have been identified, particularly in the IT control environment. Future regulatory changes in relation to the reporting and monitoring non-financial KPIs were discussed, with internal audit acting as critical friend to the sustainability team at the request of the Audit Committee.	In progress

Significant financial statement reporting items

The Committee, with support from the external auditors, reviewed those items in the Group's financial statements that have the potential to significantly impact reporting. These are set out below.

Pensions: The Committee monitored the Group's pension arrangements, in particular the funding of the defined benefit plans in the UK, the US and the Netherlands, which are sensitive to assumptions made in respect of discount rates, salary increases and inflation.

The Group engages external actuarial specialists. The Committee reviewed the actuarial assumptions used and compared them with those used by other companies. The external auditors also challenged the benchmark assumptions applied and conducted sensitivity analysis. The Committee considered this work and found the assumptions to be reasonable.

The Committee also assessed the considerations in relation to the transfer of the Netherlands defined benefit pension scheme to a collective defined contribution arrangement, resulting in the settlement of the scheme's assets and liabilities of £207.1m and a corresponding gain of £11.2m. After review, the Committee was satisfied with the settlement accounting in the financial statements.

Goodwill impairment: The strategy of the Group includes acquiring new technologies and businesses operating in adjacent markets. 2021 saw two acquisitions for Croda. As a result, goodwill represents a significant asset value on the balance sheet of £852.0m out of total net assets of £1,765.9m at 31 December 2021.

The Committee completed its annual impairment review of the carrying value of goodwill, as prepared by management, including the detailed sensitivity analysis to a number of underlying assumptions, including the ongoing impact of COVID-19, and the broader consequences on the markets in which the Group operates. The Committee assessed the methodologies used and the adequacy of the management disclosures. Particular attention was given to Iberchem's cash generating units, which had the smallest headroom between their carrying values and value in use. The Committee reviewed the methodology adopted to evaluate the risk of goodwill impairment. After challenge, the Committee was satisfied that the assumptions were reasonable and that no impairments were necessary; however, enhanced disclosure was agreed to be appropriate, given the sensitivity of the calculations to certain assumptions.

Impact of the divestment of the majority of PTIC: On 22 December 2021, the Group announced an agreement to dispose of the majority of the PTIC businesses and is currently working with the acquirer on the process to separate the businesses, with completion of the divestment expected in summer 2022.

The Committee assessed the key accounting considerations, and after challenge, was satisfied that the disposal group did not meet the requirements to be classified as held-for-sale as at 31 December 2021.

Parent Company's carrying value of investments in subsidiaries and intercompany receivables: The Committee considered the carrying amount of parent Company's investments in subsidiaries and intercompany debtors, held at cost less impairment, representing 98% of parent Company's total assets (2020: 99%).

The recoverability of these balances is not considered judgemental; however, they are the most significant component of the parent Company balance sheet and therefore require additional consideration as part of preparing the financial statements. This included comparing the carrying amount with the respective subsidiary's net asset value, profitability and cash generation. After review, the Committee was satisfied that the recoverability of these balances was acceptable, and no impairments were necessary.

Internal audit and risk management

I met with the Vice President Risk and Assurance several times during the year outside of the formal meetings to discuss the performance and output of the internal audit function and aspects of risk management. The Vice President Risk and Assurance attended each Committee meeting and presented an internal audit report that was fully reviewed and discussed, highlighting any major deviations from the annual plan agreed with the Committee.

At each meeting, the Committee considered the results of the audits undertaken and the adequacy of management's response to matters raised, including the time taken to resolve such matters. Particular focus was addressed to those areas where there was a major divergence between the outcome of the internal audit and the scoring of the self-assessment questionnaire, completed annually by each business unit. In these instances, the Committee challenged management as to what actions it was taking to minimise the chances of divergences arising in the future.

In January, the Committee conducted its annual review of the internal audit function, including its approach to audit planning and risk assessment, communication within the business and with the Committee and its relationship with the external auditors. Senior management feedback from sites included in the 2021 audit programme is gathered by questionnaire to support this process. These did not highlight any significant areas for development. In the light of the continuing requirement for virtual audits in 2021, the Committee was pleased with progress.

Details on how the Business monitors risk and how it implements its risk management framework are set out on pages 50 to 55.

External auditors' effectiveness

During the year, the Committee assessed the effectiveness of KPMG as Group external auditor. To assist in the assessment, the Committee considered the quality of reports from KPMG and the additional insights provided by the audit team, particularly at partner level. It took account of the views of the Group Finance Director and Group Financial Controller, who had discussed subsidiary component audits with local audit partners, to gauge the quality of the team and knowledge and understanding of the business. The Committee also considered how well the auditor assessed key accounting and audit judgements and the way it applied constructive challenge and professional scepticism in dealing with management.

The Committee also reviewed the output from a questionnaire completed by senior members of the finance team to obtain their views on KPMG's effectiveness in carrying out the 2021 audit. The questionnaire covered:

- Quality of planning, delivery and execution of the audit.
- Quality and knowledge of the audit team.
- Effectiveness of communications between management and the audit team.
- Robustness of the audit, including the audit team's ability to challenge management as well as demonstrate professional scepticism and independence.

Following the review, the Committee concluded that the audit was effective and overall the Committee was satisfied with the performance of KPMG.

Croda is in compliance with the Statutory Audit Services Order 2014. We undertook an audit tender in 2017 and the Board appointed KPMG as external auditor, with Chris Hearld as the Lead Audit Partner. The first year to be audited by KPMG was the year ended 31 December 2018. Following an organisational change in KPMG, Chris Hearld stepped down as Lead Audit Partner following the AGM 2021 and was succeeded by Ian Griffiths.

External auditor's independence

The Committee and the Board place great emphasis on the objectivity of the Group's external auditors in reporting to shareholders.

Our Group policy on the provision of non-audit services by external auditors, which is on our website www.croda.com, sets out permitted and prohibited non-audit services and the controls over assignments awarded to the external auditor to ensure that audit independence is not compromised and the provision of such services do not impair the external auditor's objectivity. KPMG have not been required to terminate any services that would not be permissible under the Standard.

In 2021, non-audit fees were £0.1m, significantly less than the total audit fees of £1.7m; the non-audit to audit fees ratio stands at 0.1:1.

The Committee undertook its annual review of the Group's policies relating to external audit, including the policy that governs how and when employees and former employees of the Group's auditors can be employed by the Company. No changes were made. The Committee also reviewed and accepted KPMG's Independence letter which annually confirms their independence and compliance with the Financial Reporting Council's (FRC) ethical standard.

In conclusion, the Committee agreed that KPMG were independent.

External auditor reappointment

As noted above, the Committee recommended to the Board that KPMG be offered for re-election at the forthcoming AGM.

I will be available at the shareholder engagement event to respond to any questions shareholders may raise on the Committee's activities in the year.

John Ramsay
Chair of the Audit Committee

Ethical compliance review

Under its terms of reference, the Committee is tasked with an annual review of the Company's anti-bribery and corruption, fraud and whistleblowing procedures. In 2021, the Committee's review of these matters consisted of receiving reports and presentations from the executive owner of the procedures. The Committee was satisfied that the design and focus of the ethics programme took account of the Company's increasing presence in emerging economies, which could often pose elevated compliance and reputational risks.

The Committee discussed the progress of integrating Iberchem and other recently acquired companies within the Group's ethics programme and were comfortable with the work undertaken and with the level the engagement by the newly acquired businesses.

The Committee considered that the work of the ethics committee in its robust oversight of the development and reinforcement of the Group's ethics strategy and considered that it was demonstrative of the top-level commitment to anti-bribery by the executive team. The Group had 48 ethical risk assessments in place at the site level, which accurately recorded detailed assessments of the local bribery risk.

The recently updated ethical compliance manual had been effective in proceduralising the ethics programme, and had been supplemented with practical 'how to do' guidance notes. Training programmes continued to operate effectively, with over 1,000 employees undertaking training during the year (online or face-to-face). The Group's Speak Up line was working effectively, and the Committee were satisfied that the procedure for investigating reports was robust and being undertaken by independent experts. During 2021, 93 reports were made using the Speak Up line and every report had been investigated with no serious allegations having been substantiated.

The Committee reviewed the KPIs that tracked and monitored how the ethics programme was embedded and were used as leading and lagging indicators of ethical risks.

The Committee conducted a review of the Group's fraud policy and procedures – with no changes being required. No instances of fraud were brought to the Committee's attention.

Report of the Remuneration Committee

for the year ended 31 December 2021

> **Croda's remuneration approach plays a key role in the continued achievement of the Group's strategic objectives and in the delivery of sustainable, profitable growth."**

Dr Helena Ganczakowski
Chair of the Remuneration Committee

Contents

A. Chair's letter

On behalf of the Board and the Remuneration Committee, I am pleased to present Croda's Directors' Remuneration Report for the year ended 31 December 2021. I would like to thank my colleagues for their engagement throughout the year, and to welcome Julie Kim as a new member of the Committee in 2021 and Nawal Ouzren who joined the Committee in February 2022.

The Committee believes that Croda's remuneration approach plays a key role in the continued achievement of the Group's strategic objectives and in the delivery of sustainable, profitable growth. In 2019 we reviewed and updated our policy to ensure ongoing alignment to Croda's evolving ambition and received 97.6% votes in favour. Last year we were pleased to receive 98.8% votes in favour of the 2020 Remuneration Report.

The Remuneration Committee is not proposing any material changes to the operation of the policy in 2022, being satisfied with both the outcome of the 2019 review and subsequent minor changes made last year.

Continued strong progress

I am pleased to confirm that Croda continues to progress successfully in line with its strategy, with excellent, profitable growth across all sectors. Recent acquisitions have been successfully incorporated, opening up new fast growth markets, and vigorous progress has been made in building the Life Sciences platform. The full year financial results were very strong, with reported sales up 36%, driven by organic growth and acquisitions, and with improving margin driving excellent profit growth.

This pleasing performance was delivered despite the ongoing challenges of COVID-19 where we continued to balance the needs of all our stakeholders while always ensuring the health and safety of our employees. As we reported last year, in managing COVID-19, we have not made anyone redundant or furloughed any employees and have protected pay and benefits, including for those unable to work normally due to the need to self-isolate or work from home. We also provided support for our suppliers and customers, where appropriate, and continued to pay dividends for our shareholders.

Alignment to strategic objectives

Croda's strategy continues to focus on consistently delivering sustainable, profitable growth by providing innovative, sustainable solutions to our customers consistent with our Purpose: Smart science to improve lives™.

During 2021 we conducted a strategic review of our Performance Technologies and Industrial Chemicals (PTIC) businesses to decide on the best ownership structure going forward. The conclusion of this review was to sell the majority of the PTIC businesses to Cargill, a company which has a distinguished history and strong values.

Under Cargill's ownership, PTIC and its employees will benefit from further investment which will enable the business and employees to capture new growth opportunities and flourish.

In March 2021 we acquired Alban Muller, a leader in the creation and supply of natural and botanical ingredients for the global beauty industry, and in June 2021 our wholly owned Iberchem subsidiary successfully completed the acquisition of Parfex S.A., a fine fragrance business based in Grasse, France. These acquisitions, alongside Iberchem and Avanti in 2020, all represent strong alignment to our objective of transitioning to a pure-play Life Sciences and Consumer Care company.

Delivering sustainable, profitable growth is directly reflected in our performance measures and stretching targets. The Group Profit Incentive Bonus Scheme (senior annual Bonus Plan) is based on a single operating profit metric with no pay-out unless the previous year's outcome is exceeded.

For the longer-term Performance Share Plan (PSP), 35% of the award is based on earnings per share (EPS) growth and 35% is based on relative Total Shareholder Return (TSR) performance against a bespoke group of our most relevant competitors. 30% of the 2022 award will continue to be based on sustainability metrics. Within this, 15% will be based on our innovation metric, New and Protected Products (NPP); those products that will drive our future growth. Innovating sustainably is core to Croda's success, and we continue to focus management on the delivery of this. The remaining 15% will be focused on selected KPIs aligned to the delivery of our 'Climate Positive' and 'People Positive' sustainability commitments. We have also revised our EVA underpin to a more discretionary basis following the divestment of the majority of the PTIC businesses.

Performance is always considered holistically; each year the Committee applies a Discretion Framework to satisfy itself that the outcome in terms of primary performance metrics has not been to the detriment of other measures of corporate performance. Health & safety always remains a key metric of particular focus in this review.

Workforce engagement

In 2021 I met with a cross section of employees through a series of listening groups in Asia, the Americas and Western Europe. Participants expressed their appreciation at the content and openness of the sessions which provided me with valuable feedback on a broad range of reward topics, including executive remuneration. In addition, there is a dedicated email address where employees can communicate with me directly and my Board colleagues also held listening groups throughout 2021 covering a range of topics including reward.

The Committee receives regular updates on employees' global terms and conditions, and we are made aware of any significant policy changes impacting employees. In 2021 we were pleased to note that flexible working was extended across the business including the facilitation of increased home working and flexible hours. The pay and benefits of employees that choose to work flexibly are maintained in full reflecting our belief that flexible working enhances productivity.

In response to COVID-19 we also continued our wellbeing initiatives; all sites offered targeted activities; some have been local one-off events and others are more broadly applicable such as the availability of Employee Assistance Programmes globally. We continued to use our online recognition programme in North America and Latin America and our Asia colleagues launched their own programme, 'Kudos!'.

Alignment of executive reward with the wider workforce

Our 'One Croda' culture drives focus on the alignment of executive reward with the wider workforce. In 2021 we launched a 'Free Share Plan' for all of our employees who are not eligible to receive the senior annual Bonus Plan. As the senior annual Bonus Plan paid out for 2021, every employee globally in the Free Share Plan, around 5,150 in total, will receive ten Croda shares or the cash equivalent, payable in May 2022. This Plan is in addition to other reward plans offered at a local level.

In 2018 we gained accreditation in the UK as a Living Wage Employer from the Living Wage Foundation. In 2021 we extended this globally to complete an assessment of all employees worldwide, in partnership with the Fair Wage Network, establishing a Living Wage in each of the countries in which we operate and ensuring all employees receive this as a minimum. Our target for 2022 is to ensure that this is also applied to all of our regularly employed contractors.

In line with our 'One Croda' culture, our senior leaders all share the same performance metrics for the senior annual Bonus Plan and PSP. Around 510 employees participate in the senior annual Bonus Plan and 66 of these are also in the PSP. We believe that this focuses our leadership on working together globally to deliver the best overall outcome for our customers and, in turn, our shareholders and other stakeholders.

Pay for all employees is set in line with the market and closely monitored and in 2021 we conducted extensive salary benchmarking in many countries, making adjustments where it was appropriate to do so. Local bonus schemes are available for those below senior leader level in most regions. Around 84% of our UK workforce and 60% globally participate in share plans and therefore benefit from the rewards enjoyed by all shareholders.

We continue to offer a career average defined benefit pension scheme that is open to all new and existing UK employees, a generous and inclusive benefit for our UK workforce. An important part of the value to employees is that the level of accrued pension is guaranteed, as the Company bears all the investment risk. This security for our workforce is an important part of our 'One Croda' culture. In 2020 we reduced Executive Director pension supplements to align to the UK workforce.

Remuneration out-turn for 2021

Croda delivered an outstanding performance in 2021 with very strong sales and profit growth, driven in part by lipid system sales for COVID-19 applications. The Committee determined that, given the unique nature and scale of this piece of business, the profit from our principal COVID-19 vaccine contract should be excluded from the Bonusable Profit calculation for both the 2021 and 2022 bonus.

In line with our usual practice, profit contributions from in-year acquisitions (e.g. Parfex and Alban Muller) are excluded from the calculation to ensure a like-for-like comparison with the base year.

Bonusable Profit (after exclusion of in-year acquisition profits and the lipid system sales for our principal COVID-19 vaccine contract) significantly exceeded the outcome for 2020 and the maximum payout target. The Committee used the Discretion Framework to satisfy itself that this performance was robust and sustainable by reviewing underlying performance. The Committee determined that 100% of the senior annual Bonus Plan was payable.

Croda's longer-term performance in profitable growth and Total Shareholder Return was also very strong and reflected the long-term growth trajectory of the business. 2021 was the year in which PSP grants made in 2019 concluded their three-year period, and the Committee reviewed performance for the targets that were set at that time. Over the period TSR performance was 109.8%, placing Croda in the top quartile against our bespoke comparator group with 100% of this part of the award vesting. Our strong profit performance led to EPS growth of 31.4%, which resulted in a 93.5% payment of this part of the award. NPP growth, for the first time, met the stretching vesting target, which reflected the ambition of this metric and led to a payment of 100% of this part of the award.

The PSP award is dependent on satisfactory underlying financial performance of the Group. The Committee considered this, and a range of other broader performance criteria using the Discretion Framework, and concluded that the PSP awards were consistent with and reflective of overall financial performance over the time period. Therefore, after consideration of all factors, an overall PSP vesting of 97.4% of the total award was agreed.

Salaries for 2022

For 2022, the general salary increase set for the UK workforce is 5%, with additional funds available to address specific market issues.

The Committee considered the salaries of the Executive Directors in the context of the UK workforce increases, low positioning against market benchmarks, Croda's overall strong performance and the strong performance of the Executive Directors, and concluded that the 2022 salary increase for Executive Directors should be in line with that of the UK workforce.

A review of the Chair fees was also undertaken and, reflecting similar principles and the continuing high time commitment, an increase in line with that of the UK workforce was also awarded.

Looking ahead

Measures and targets for 2022 have been set for the senior annual Bonus Plan and PSP, as outlined above.

The Remuneration Policy is due for its triennial renewal at the 2023 AGM and therefore during 2022 we will be undertaking a comprehensive review to ensure that it continues to align to our strategy, taking on board input and advice from our investors and other stakeholders. We remain committed to ensuring that our remuneration framework reflects the evolving needs of all of our stakeholders and the communities in which we operate.

Helena Ganczakowski

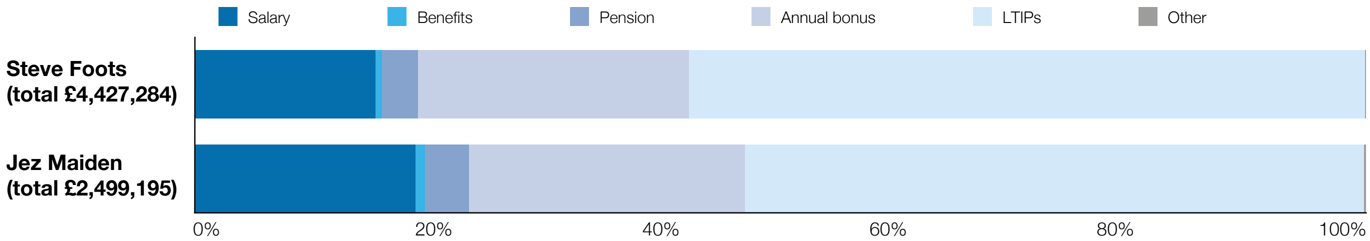
Dr Helena Ganczakowski
Chair of the Remuneration Committee

B. Remuneration at a glance

How we performed in 2021

Adjusted Operating Profit	Adjusted EPS	NPP	Total Shareholder Return
+46.6% to **£468.6m**	+42.5% to **250.0p**	**37%** of Group sales	**109.8%** over the three-year PSP performance period (1 January 2019 to 31 December 2021)

Single figure remuneration:



Operation of our policy in 2021

Key component and timeline	Feature	Metrics and results	Group Chief Executive (CEO)	Group Finance Director (GFD)
Basic salary	Competitive package to attract and retain high calibre executives.	• Pay rise of 1% awarded to Executive Directors. • UK workforce was awarded a 1% increase. An additional 1% increase was awarded to the majority of the UK workforce in July 2021, excluding Executive Directors and those in our most senior grades.	£682,340	£470,579
Annual bonus	Incentivise delivery of strategic plan, targets set in line with Group KPIs.	***Bonusable Profit*** (see page 95 for definition of Bonusable Profit) Threshold: 2020 actual Maximum: 2020 actual plus 10% Actual: 2020 actual plus 24% **100% of maximum bonus paid**	£1,023,510	£588,224
Deferred element of bonus	Compulsory deferral of one third of bonus into shares with three-year holding period to align with long-term business performance.	N/A	Of which £341,170 is deferred	Of which £196,075 is deferred
PSP	Incentivise execution of the business strategy over long-term measuring profit, shareholder value and innovation.	***Vesting of the 2019 PSP award*** (see table below) **Total payout – 97.4%**	£2,556,242	£1,322,175
Pension	Pension benefits are either a capped career average defined benefit pension plan with a cash supplement above the cap, or a cash supplement. For 2021, cash allowance of up to 20% of salary, in line with the UK workforce.	N/A	£136,635	£94,116
Shareholding requirements	Share ownership guideline to ensure material personal stake in business.	• CEO – 225% of salary • GFD – 175% of salary	>225% of salary	>175% of salary

Vesting of the 2019 PSP award

	Threshold	Maximum	Actual	% payout
EPS*	5%	11%	10.5%	93.5%
TSR	Median	Upper Quartile (UQ)	89.4 percentile Above UQ	100%
NPP**	NPP sales growth to be at least twice non-NPP sales.		3.8x	100%

Total payout – 97.4%

* EPS growth p.a. is calculated on a simple average basis over the three-year period.
** Subject to a minimum average of 5% growth per year and overall positive Group profit growth.

C. Report of the Remuneration Committee for the year ended 31 December 2021

Contents

1. Summary of Remuneration Policy adopted in 2020

An updated Remuneration Policy was presented and approved by shareholders at the 2020 AGM. This is intended to operate until the AGM in 2023. In reviewing the Policy and its implementation, the Remuneration Committee undertook a thorough review of existing arrangements with a particular focus on alignment to Croda's strategy and ambitions. This review was completed with the following principal objectives in mind:

- achieve the closest possible alignment with the Company's strategy;
- support the Company's ambition to be a purpose-led organisation focused on Smart science to improve lives™;
- ensure that business performance is appropriately measured and rewarded and that the scale of reward is proportionate;
- make certain that the Policy properly reflects the various interests of all our stakeholders in its structure and metrics;
- ensure that the Policy is fair and competitive and that it also considers reward more broadly in the organisation;
- disclose the Policy in an open and transparent way.

The Remuneration Committee is not proposing any substantive changes to the operation of the Policy in 2022, being satisfied with both the outcome of the review and the minor changes made since then.

In line with the normal three-year cycle under the remuneration reporting regulations, a new Policy will be subject to shareholder approval at the 2023 AGM. In advance of this, during 2022, the Remuneration Committee will undertake a review of the existing Policy to ensure it continues to align to Croda's strategy, taking on board input and advice from investors and other stakeholders.

Summary of Policy and its operation

Salary	Set taking into account an individual's responsibilities, performance and experience as well as pay and employment conditions elsewhere in the Group and other external factors.
Annual bonus	Maximum annual bonus opportunities: • Group Chief Executive – 150% of salary • Group Finance Director – 125% of salary Bonusable Profit growth targets, with no bonus payable until the previous year's profit is exceeded. Discretion Framework applies, which includes health, safety and environmental performance. One third deferred for three years. Malus and clawback provisions apply.
Performance Share Plan	Normal maximum PSP opportunities: • Group Chief Executive – 225% of salary • Group Finance Director – 175% of salary Awards based on financial (e.g. EPS), shareholder return (e.g. relative TSR) and strategic (e.g. sustainability) metrics. The Discretion Framework also applies, which includes satisfactory underlying financial performance. Three-year performance period with an additional two-year holding period. Malus and clawback provisions apply.
Pension and benefits	Pension benefits are either a capped career average defined benefit pension plan with a cash supplement above the cap, or a cash supplement. Cash allowance for Executive Directors of up to 20% of salary which aligns with our UK workforce. Typical other benefits include a company car, private fuel allowance, private health insurance and other insured benefits.
Shareholding guidelines	Shareholding guidelines of: • Group Chief Executive – 225% of salary • Group Finance Director – 175% of salary Post-employment shareholding guidelines also apply for two years after leaving employment. These are set at 100% of the in-employment guideline for the first year after leaving employment, tapering to 0% by the end of year two. This policy applies to shares from awards that vest in 2020 and beyond. The Committee is implementing structures to ensure that post-employment shareholding guidelines are adhered to, by the placing of restrictions on the sale of shares via our third-party share plan administrator.

Further details about the Policy can be found on pages 106 to 108.

2. How our reward strategy aligns to and supports the delivery of our business strategy

Over the last eighteen months we have accelerated key elements of our strategy to complete our transition to a dedicated Consumer Care and Life Sciences company. Across these markets, innovation and sustainability will be the core drivers of our future growth. In developing and implementing our Remuneration Policy the Committee has been mindful to ensure that every element of reward directly aligns to our strategy, ensuring we provide and protect long-term shareholder value.

Element of reward	Link to strategy	Sustainability	Innovation	Growth	Long-term shareholder value
Annual bonus					
Profit	Clear and simple measure that supports our strategic objective of consistent bottom-line growth. One third of awards are deferred, further protecting shareholder value.			✓	✓
Performance Share Plan					
Earnings per share (EPS)	A measure of earnings growth over a three-year period recognising that sustained growth can only come through relentless innovation.		✓	✓	✓
Total Shareholder Return (TSR)	Measured against our peers, a key indicator of long-term growth and shareholder value.		✓	✓	✓
New & Protected Products (NPP)	An established measure of innovation, the metric is growth of NPP products versus non-NPP products rewarding growth that is driven by innovation.	✓	✓	✓	✓
Sustainability	Over the last three years we have incorporated sustainability metrics directly linked to our ambitions to be Climate, Land and People Positive by 2030.	✓	✓	✓	✓
Underpins & Discretion Framework					
Safety, Health and Environment (SHE)	The SHE underpins ensure that rewards are not made at the expense of the safety, health and environment of our employees or the communities that we serve.	✓			✓
Financial underpins	The financial underpins including EVA within our Discretion Framework ensure that reward reflects the overall financial health of the business.		✓	✓	✓
Culture and ethics	The culture and ethics underpin ensures that reward reflects strong governance and the experience of all our stakeholders.	✓			✓
Other features					
Holding periods	Extends the period to five years before shares are released, further protecting shareholder value.				✓
Shareholding requirements	Ensures that our Executives' interests are aligned to shareholders.				✓
Malus and clawback	Allows incentive awards to be clawed back or reduced in the event of significant financial or personal misconduct.				✓

3. How our Remuneration Policy reflects the UK Corporate Governance Code

When developing the Remuneration Policy, the Committee was mindful of the UK Corporate Governance Code and considers that the executive remuneration framework appropriately addresses the following factors:

Factors	How these are addressed
Clarity	Our values of openness and transparency are reflected in our reward principles. The Committee is committed to providing open and transparent disclosure on executive remuneration for our stakeholders. Our arrangements are clearly disclosed and any changes to our Remuneration Policy and its operation are highlighted in a way that defines their alignment to both our strategic ambitions as well as the provisions of the UK Corporate Governance Code.
Simplicity	Our executive remuneration arrangements, as well as those throughout the global organisation, are simple in nature and well understood by both participants and shareholders. Our senior annual Bonus Plan, in which around 510 of our global employees participate, is based on a single profit metric, with a simple key requirement that no bonus can be paid until the previous year's profit is exceeded.
Risk	The Committee considers that the structure of incentive arrangements does not encourage inappropriate risk-taking. Performance is based on a balance of metrics which also reflect our broader stakeholders, for example inclusion of sustainability targets and health and safety underpins. We then take a holistic assessment of performance using our Discretion Framework. Annual bonus deferral, the PSP holding period and our shareholding guidelines provide a clear link to the ongoing performance of the business as well as alignment with shareholders. Executives will be rewarded for sustainable long-term shareholder return. Malus and clawback provisions also apply for both the senior annual Bonus Plan and PSP.
Predictability	Our Remuneration Policy contains details of maximum opportunity levels for each component of pay, with actual incentive outcomes varying depending on the level of performance achieved against specific measures.
Proportionality	Our Remuneration Policy directly aligns to our strategy and financial performance. The Committee considers performance from a range of perspectives. Poor financial performance is not rewarded.
Alignment to culture	Alignment to our 'One Croda' culture is clearly established in our Remuneration Policy; our senior annual Bonus Plan has the same metric for all participants, our PSP metrics reflect our commitment to sustainability and pensions are aligned across the workforce.

Our Discretion Framework

To enhance the rigour with which performance is reviewed the Committee has adopted a Discretion Framework which it applies when assessing bonus and long-term incentive plan outcomes. As with all Board/Committee decisions (in line with section 172) we also reflect on the experience of all our stakeholders throughout the course of the plan periods.

What is the formulaic result following consideration of the existing underpins?

What is the single figure outcome?
Committee to consider year-on-year change and whether this mirrors the trend in performance

How does the outcome compare with wider shareholder experience?
Committee to consider Total Shareholder Return in both relative and absolute terms over a number of different periods

How does the outcome compare with overall Company performance?
Consider performance against other KPIs, for example

ROIC and EVA | Sales | Profit growth | Sustainability

Culture and conduct

Culture | Conduct | Health and safety | Systems and control

Are there any external headwinds or tailwinds which need to be considered?

Are there any other events that should be factored in?
Other events could be reputational/risk related or a change of accounting standards

As an additional reference point, are the bonus and PSP outcomes consistent?

Input from others?
Draw on input from other Committees as well as other management teams including HR, Legal, Internal Audit and Risk

Consider shareholder response to results
The Committee may also want to reflect on how the market is likely to respond to the preliminary results

Compare with historical use of discretion

Does the outcome appear reasonable/fair, or should an adjustment be considered?

4. Reward in the wider employee context

Workforce engagement

Engagement with the workforce is an area in which we continue to make progress. In addition to continuing with established workforce engagement channels (pulse surveys and a dedicated email address for employees to contact the Chair of the Committee), in 2021, the Chair of the Remuneration Committee attended virtual listening groups where employees discussed and shared their thoughts on executive remuneration and reward in the wider business. As 2022 will be the year that we consider our Remuneration Policy, with any changes adopted in 2023, we plan to engage the workforce more widely through pulse surveys and further listening groups with the Chair of the Remuneration Committee. A summary of engagement activities undertaken to date is as follows:

Reward principles	Our reward principles, which were developed and approved during 2019, guide the way we recognise and remunerate all our global employees. These principles focus on total reward including intangible rewards and were strongly influenced by the results of our previous Global Employee Survey. These have been shared across the organisation.
Employee pulse surveys	In 2021, a small number of pulse surveys covering a range of topics, including COVID-19 and resulting changes to the workplace, were undertaken and findings were shared with the Board as well as management to help guide decisions. For 2022 a new series of pulse surveys covering culture and reward will be issued.
Listening groups	During 2021, Helena Ganczakowski, Chair of the Remuneration Committee, held listening groups across a cross-section of employees in Asia, the Americas and Western Europe. Helena presented on the role of the Board and the Remuneration Committee and also shared an overview of the Elements of Reward at Croda and feedback on the Global Reward pulse survey conducted in 2020. The sessions were greatly appreciated by those who attended, with a number of participants noting that they had limited knowledge of the Board and Remuneration Committee before the session. The Chair of the Board and other Non-Executive Directors also attended listening groups throughout the year. Anita Frew held listening groups to better understand how employees were feeling on a range of different topics, including strategy, culture, recognition, and value. These listening groups also focused on employees' wellbeing at Croda and what additional support the Board could offer. Roberto Cirillo presented listening groups on Board responsibilities to a cross section of employees in Italian.
Dedicated email to Chair of Committee	A dedicated email address has been established for employees to send comments or questions to the Chair of the Remuneration Committee.
Overview of pay and policy decisions	Committee members are updated annually on global employees' terms and conditions and are made aware of any significant changes to policies and other pay-related matters.

How our Remuneration Policy relates to reward in the wider employee context

When making decisions about executive remuneration the Committee considers the pay and reward structures across the business. Annually, the Group Human Resources Director provides the Committee with a review of workforce remuneration, and the Committee is updated periodically on any feedback received on remuneration practices across the Group.

One of the principles of Croda's culture is to drive 'One Croda', therefore, many of the remuneration structures that apply to Executives also apply further in the global organisation, as set out in the table below. The key difference between the policy for Executive Directors compared to other employees is that remuneration for Executive Directors is more heavily weighted towards variable pay and share ownership.

Remuneration element	Who participates?	Details
Base pay	All employees	Pay is set in line with the market and closely monitored. Any comparator group used as a reference point is country and/or industry specific. We pay a 'Living Wage' globally.
Annual bonus	Executive Directors, Executive Committee, senior leaders and senior managers (c. 510 employees globally)	Consistent senior annual Bonus Plan aligned to increase in annual profit. Operates on a tiered basis from 150% of salary to 20% of salary across the most senior global grades. Deferral applies for Executive Directors and members of the Executive Committee.
	All other employees	Local schemes apply in many locations.
Free Share Plan	All employees who do not participate in the senior annual Bonus Plan (c. 5,150 employees globally)	New for 2021, an award of free shares or the cash equivalent if the senior annual Bonus Plan pays out. For 2021 this will be 10 shares or the cash equivalent.
Performance Share Plan	Executive Directors, Executive Committee and senior leaders (c. 66 employees globally)	Consistent PSP based on EPS, TSR and sustainability metrics, including NPP. Operates on a tiered basis from 225% of salary to 30% of salary across the most senior global grades.
Restricted Share Plan	Selected employees generally not eligible for PSP	Discretionary awards can be granted annually to selected employees to reward exemplary performance.
All employee share plans[1]	All employees	Employees can participate in our global Sharesave Scheme, subject to qualifying service, allowing everyone to save monthly and purchase discounted shares.
Pension (UK only)[2]	All employees	Defined benefit plan based on career average salary plus 20% cash supplement paid for salaries above the cap or to employees who are tax limited and have opted out of the pension scheme.

1. Sharesave or similar schemes are provided where local social security laws allow.
2. Other pension arrangements, aligned to local practice and legislation, are available in many of our locations.

5. Sharing success across the business

The Committee believes in sharing success across the business and extending share ownership more widely across our employee base. This is promoted through the operation of a new 'Free Share Plan' and a number of all-employee share schemes.

Free Share Plan

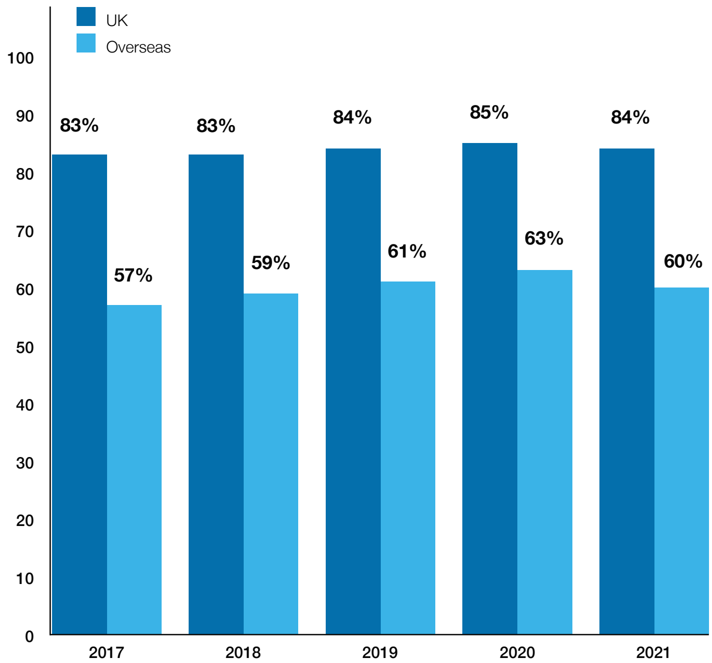
Croda is proud to announce that in 2021 we launched the 'Free Share Plan'. Under this new plan, all employees globally who are not eligible for the senior annual Bonus Plan will be gifted Croda shares (or the cash equivalent) if the senior annual Bonus Plan pays out. Unlike other elements of remuneration this award is not set as a multiple of salary, instead it rewards all eligible employees at the same value.

The Free Share Plan was developed in response to findings from the Global Reward Survey in 2020 and aims to share success more widely across the business and encourage share ownership.

As the senior annual Bonus Plan paid out for 2021, all eligible employees will receive 10 Croda shares (or the cash equivalent) in April 2022 under the Free Share Plan. The value of the award is determined by the share price at vesting and based on the recent share price will be in the region of £706 (based on a share price of £70.60 on 18 February 2022).

All-employee share schemes

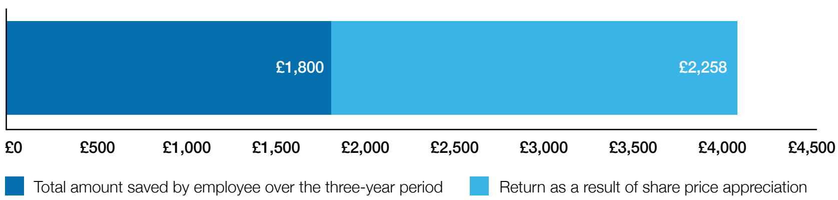
Workforce participation in these plans has remained consistently strong and is driven by our culture of employees feeling a strong loyalty to the business.



Croda's strong share price performance has led to the all-employee share schemes being a strong benefit for employees.

Example value of the 2018 Sharesave Scheme

The 2018 Sharesave Scheme which was granted in September 2018 at a share price of 4144p could be exercised from November 2021. The price of Croda shares on the settlement date in November 2021 was 9438.2p, meaning employees could have made a potential return of c.128% on their savings. For example, an employee saving £50 a month would have made a profit in excess of £2,258.



Living Wage

We were pleased to announce in 2018 that we gained accreditation in the UK as a Living Wage Employer from the Living Wage Foundation. In 2022, we will continue to ensure that all our UK employees and regular contractors are paid at, or above, the rates advised by the Living Wage Foundation.

In addition, the business continues to pursue its Global Living Wage target, one of our sustainability KPIs linked to the UN SDGs. In 2020 we forged a partnership with the Fair Wage Network (FWN) to establish, using an independent and economically rigorous methodology, Living Wage levels across the world. In 2021, we compared our global wage levels to Living Wage comparators provided by the FWN and made all necessary adjustments to ensure that all our employees are now paid a Living Wage at a minimum.

We have established processes to ensure that Living Wage levels are reviewed annually and the necessary adjustments to wages are made in order to continue paying a Living Wage to all employees.

In addition, we will also begin to plan for and progress towards our commitment of paying a Living Wage to all regularly employed contractors globally by the end of 2022.

More than just pay

Our employees and our culture remain central to the continued success of Croda. Croda has been resilient in its response to COVID-19 and during the pandemic the wellbeing and safety of our employees has been and continues to be a key priority.

In addition, we continue to enhance our range of other workforce initiatives, including:

- We continued with the rollout of our online recognition programme, Croda Stars, in North America and Latin America. An online recognition programme, Kudos! was also launched in Asia. All programmes have been positively received by employees.
- We are proud of the training and development that we provide for employees and have set a target of ensuring all employees receive at least one week of training a year by the end of 2025. In 2021, our employees undertook over 93,000 hours of training with the average number of hours an employee completed being 16 hours.
- We relaunched and redesigned our core company development programmes for senior leaders and future leaders with our values at their heart.
- We launched a new inclusion based global leadership programme, Phoenix Rising, and a series of leadership webinars on diversity & inclusive leadership.
- We recorded over 100 wellbeing activities which took place in 2021. We also extended Employee Assistance Programmes in many of our countries.

6. Promoting diversity & inclusion

As a business with innovation at its heart, diversity of thought and ideas is critical to our long-term success and we are committed to encouraging and promoting all types of diversity within our organisation. We have established a global Diversity & Inclusion Steering Committee plus a number of regional and country committees designed to discuss and promote diversity & inclusion.

At the beginning of 2021, we published a Board diversity & inclusion policy and communicated our commitment to greater diversity within our business. Julie Kim was appointed as a new member of the Board in 2021 and Nawal Ouzren joined the Board in February 2022. These two appointments mean we have fulfilled our commitment to meeting the requirements of the Parker Review on ethnic diversity as well as also achieving full gender balance on the Board.

In 2021 we ran a global diversity survey to collect wider diversity data in the organisation. All data was collected in good faith, in line with local laws and legal restrictions, including data privacy regulations. The data will be used to influence future work and is the first step in being able to report on our ethnicity pay gap. For further information on this please refer to page 37.

7. Other disclosures

UK gender pay gap

The table below shows a summary of the gender pay gap for UK employees of Croda Europe Ltd:

	2018	2019	2020	2021
Mean pay gap	27.68%	27.06%	18.72%	17.70%
Median pay gap	23.10%	23.90%	19.22%	21.11%
Mean bonus gap	63.05%	67.08%	64.36%	62.58%
Median bonus gap*	33.26%	33.36%	0%	0%

* The senior annual Bonus Plan and Croda Europe Discretionary Bonus Scheme did not pay out for 2019 (payable in 2020) or 2020 (payable in 2021). A small number of employees received a sales bonus but the median bonus for both female and male employees was zero giving a median bonus gap of 0%.

We are confident that our gender pay gap is not an equal pay issue but is a result of a lack of female representation across our business at senior levels and particularly in production roles which represent the bulk of the workforce between the 25th and 75th percentile. Addressing this issue will require a long-term approach but we have already begun work to increase the number of females working in production and in senior positions.

The number of women in leadership positions is now 36%. We are also pleased to report that we have 43 women working as process operators across 13 of our sites globally.

Over 2020 and 2021 only 40% of hires and promotions to leadership positions were female. At this rate we will not meet our 2030 target to achieve gender balance across our leadership. Therefore, we have included a 'People Positive' target in our 2022 PSP. This target relates to the gender balance of appointments and promotions to our most senior grades.

Other actions taken to address the gender pay gap include:

- Ensuring we have a balanced shortlist for all positions that we are recruiting for; we have a target of achieving balanced shortlists for 80% of roles by 2023.
- Further improving our talent and succession planning processes to help identify and nurture talent early in their career.
- Finding ways to reduce shift work (especially night work) and to examine the feasibility of part-time and job share arrangements in our production facilities.
- Changing the way we advertise production roles to ensure we reach a diverse population.
- Improving family-friendly policies; in 2019 we introduced a new Global Parental Leave Policy and in 2020 we launched new Flexible Working guidance. All locations have implemented this and have local policies in place.
- Continuing to invest in our STEM activities to encourage a wide range of applicants to apply for roles in our business.

More information is available on the Croda website.

UK CEO pay ratio

The table below sets out the ratio of the CEO's 'single figure' total remuneration to the 25th, 50th and 75th percentile full-time equivalent total remuneration of the Company's UK employees. The pay ratios are calculated on a Group-wide basis by reference to UK employees only.

Under the regulations, there are three methodologies that companies can choose to report their pay ratio, known as Option A, B and C. For 2021 we have chosen to continue to use the Government's preferred option, Option A. Using this methodology, we have determined the full-time equivalent total remuneration for all UK employees and have ranked this data to identify employees whose remuneration places them at the 25th, 50th and 75th percentile. The pay ratios are then calculated by comparing total remuneration for these three employees against our CEO 'single figure' total remuneration.

	Methodology	25th percentile	50th percentile	75th percentile
FY 2021	A	132:1	96:1	80:1
FY 2020*	A	48:1	37:1	31:1
FY 2019	A	57:1	44:1	37:1
FY 2018**	C	85:1	67:1	57:1

1. Calculations for the workforce exclude severance pay, notice pay, SIP repayments, fractional share payments, SAR payments and relocation expenses.
2. The calculations for the workforce exclude the value of the defined benefit pension plan due to the difficulty of calculating these figures for our complex historical pension arrangements.
3. Excludes Non-Executive Directors, contractors and employees who left during the relevant year.
4. New starters, part-time employees and employees on long-term sick and maternity are included; their salary has been amended to reflect a full-time and full-year salary.

* The ratio for 2020 has been restated to reflect the updated CEO 'single figure' total remuneration for 2020. This was due to the 2020 PSP award being updated to reflect the actual share price at vesting.

** The CEO pay ratio for 2018 was calculated using Option C, which enabled us to calculate, on an indicative basis, the total remuneration packages of three individual UK employees at the 25th, 50th and 75th percentile. Option C was used in 2018 because the full administrative process to enable us to calculate the equivalent total remuneration for UK employees was not in place.

Remuneration Report (continued)

The CEO pay ratio is calculated based on the total remuneration payable to the CEO, which could include payments under the senior annual Bonus Plan and PSP. The outcomes of these elements are directly linked to performance, with the value of the PSP also incorporating share price growth. It is therefore expected that the ratios will fluctuate significantly year-on-year to reflect Croda's performance. In respect of the 2021 figures, as this has been an outstanding year for performance both the senior annual Bonus Plan and PSP have paid out at high levels. As the senior annual Bonus Plan did not pay out last year this represents a large increase in remuneration for the CEO; the PSP has also paid out at a higher level, from 40% in 2020 to 97.4% in 2021.

Employee total remuneration

	Actual base salary 2021	Total remuneration 2021
75th percentile	£48,904	£55,440
50th percentile	£30,603	£46,050
25th percentile	£27,865	£33,654

We believe that our CEO pay ratio is consistent with our pay, reward and progression policies. The sharing of success has been a strong theme in 2021 and although the CEO pay ratios have widened, employees have also benefitted from a strong performing year. The newly launched 'Free Share Plan' will pay out for 2021, rewarding our most junior employees proportionally the most, annual bonus plans will pay out globally and we awarded over double the amount of RSP awards compared to previous years.

8. Remuneration Committee year ended 31 December 2021

Responsibilities

The Committee determines and agrees with the Board the Company's Remuneration Policy and framework, which should:

- Support the Company's strategy and promote long-term sustainable success; and
- Ensure that the senior management of the Company are provided with appropriate incentives to encourage enhanced performance and are, in a fair and responsible manner, rewarded for their individual contributions to the success of the Company.

The Committee also determines the remuneration packages for all Executive Directors, members of the Executive Committee, including the Company Secretary, and the Chair of the Board and recommends and monitors the level and structure of remuneration for senior managers.

Key responsibilities

Detailed responsibilities are set out in the Committee's terms of reference, which can be found at croda.com/en-gb/investors/governance/boardcommittees/remuneration-committee.

A summary is provided below:

- Determine and agree with the Board the framework or broad policy for the remuneration of the Company's Chair, the Group Chief Executive, the Executive Directors, the Company Secretary and other members of senior management
- In determining such policy, take into account factors which it deems necessary, including relevant legal and regulatory requirements, the provisions and recommendations of the UK Corporate Governance Code and associated guidance
- Review workforce remuneration and related policies and the alignment of incentives and rewards with culture, taking these into account when setting the Remuneration Policy for Directors
- Feedback to the Board on workforce reward, incentives and conditions in support of the Board's monitoring of whether the workforce policies and practices of the Company are aligned with its Purpose, values and strategy
- Review the ongoing appropriateness and relevance of the Remuneration Policy
- Establish the selection criteria, select, appoint and set the terms of reference for any remuneration consultants who advise the Committee and obtain reliable, up-to-date information about remuneration in other companies
- Oversee any major changes in employee benefits structures throughout the Group.

Key focus areas

Remuneration outcomes for 2020 and approach for 2021:

- Remuneration outcomes for 2020, including vesting of 2018 PSP awards
- Establishing the senior annual Bonus Plan and PSP targets for 2021
- Granting of 2021 PSP awards and Restricted Share Plan awards

Wider workforce:

- Introduction of Free Share Plan
- Feedback from employee listening groups attended by the Remuneration Committee Chair
- Annual review of wider workforce remuneration

Remuneration approach for 2022:

- Review of latest market and governance developments
- Consideration of approach for 2022, including new sustainability targets
- Approval of salary increase for the CEO and Group Finance Director effective 1 January 2022
- Approval of Chair fee increase effective 1 January 2022

9. Executive Directors' remuneration for the year ending 31 December 2022

Key component	Implementation in 2022
Basic salary	Executive Directors' base salaries were reviewed during the final quarter of the financial year ended 31 December 2021. Salaries for 2022 are as follows:

	Salary at Jan 2022	Salary at Jan 2021	% Increase
Steve Foots	£716,457	£682,340	5%
Jez Maiden	£494,108	£470,579	5%

Commentary

- For 2022, the general salary increase set for the UK workforce is 5%, with additional funds available to address specific market issues.
- The Committee considered the salaries of the Executive Directors in the context of the UK workforce increases, low positioning against market benchmarks, Croda's overall strong performance and the strong performance of the Executive Directors, and concluded that the 2022 salary increase for Executive Directors should be in line with that of the UK workforce.

Other benefits

Other benefits such as company cars or car allowances, fuel allowance and health benefits are made available to Executive Directors.

Performance-related Annual Bonus Plan

Steve Foots 150% of salary | **Jez Maiden 125% of salary**

The targets for the awards are set out below:

Level of award	*Bonusable Profit	% of bonus payable
Threshold	Equivalent to 2021 actual	0%
Maximum	2021 actual plus 10%	100%

* Bonusable Profit is the growth in underlying profitability (defined for bonus purposes as Group EBITDA for continuing operations before exceptional items and any charges or credits under IFRS 2 Share-based Payments) less a notional interest charge on working capital employed during the year. Target is measured after providing for the cost of bonuses on a constant currency basis. For 2022, considering the unique nature of the business, the profit from our lipid system sales for our principal COVID-19 vaccine contract, will be excluded from the Bonusable Profit calculation.

Commentary

- No change to maximum award levels or performance measures from last year.
- When determining bonus outcomes, the Committee applies the Discretion Framework which includes a range of factors, see page 89.
- The Committee remains comfortable that the structure of the senior annual Bonus Plan does not encourage inappropriate risk-taking and that the mandatory deferral of one third of bonus into shares provides clear alignment with shareholders and fosters a longer-term link between annual performance and reward.
- Malus and clawback provisions apply.
- One third of any bonus paid will be deferred into shares for a three-year period.
- Full retrospective disclosure of targets and actual performance against these will be made in next year's Annual Report on Remuneration.
- The Committee considers the targets set for 2022 to be at least as demanding as in previous years and were set after taking due account of the Company's commercial circumstances and inflationary expectations.

Performance share plan

Steve Foots 225% of salary	**Jez Maiden 175% of salary**

The targets for the awards are set out below:

Performance measure (weighting)	Threshold vesting	Maximum vesting
EPS[1] (35%)	5% p.a.	11% p.a.
TSR[2] (35%)	Median	Upper quartile

Sustainability metrics (30%)

- NPP (15%) – NPP sales to grow at twice the rate of non-NPP, subject to overall positive Group profit growth and a minimum average of 3% NPP growth per year (25% vesting), with payments being made on a sliding scale up to 5% growth per year (maximum vesting).
- 'Climate Positive' (7.5%) – a reduction target specifically aimed at Scope 1 and 2 emissions and aligned with our external commitment to achieve a Science Based Target (SBT) in line with a 1.5°C pathway. Over the three-year PSP performance period the target is a 25.2% reduction compared to a 2018 baseline[3] with any award paid in defined ranges between:
  - a reduction of 25.2% and above would result in maximum vesting
  - a reduction of 21% would result in 50% vesting, with no vesting below this.
- 'People Positive' (7.5%) – a target aimed at increasing the number of women in leadership positions, aligned to our gender balance ambition. Over the three-year performance period the target is to appoint or promote women in more than 50% of available leadership roles with any award paid in defined ranges between:
  - 55% or above leadership roles hired being filled by women would result in maximum vesting
  - 40% of leadership roles being filled by women would result in 25% vesting, with no vesting below this.

An EVA underpin applies across the whole PSP award, such that vesting is subject to satisfactory EVA performance in the performance period, as determined by the Committee.

1. EPS growth p.a. is calculated on a simple average basis over the three-year period and therefore growth of 33% or more over three years is required for maximum vesting.
2. TSR peer group constituents: AzkoNobel, Albermarle, Ashland, BASF, Clariant, Koninklijke DSM, Eastman Chemicals, Elementis, Evonik Industries, Givaudan, Johnson Matthey, Kemira, Lanxess, Novozymes, Solvay, Symrise, Synthomer, Victrex.
3. 2018 baseline of 208,992 MTCO$_2$e has been independently verified by Avieco. As of 2021 a reduction of 12.7% has been achieved.

Commentary

- No changes to maximum award levels from last year.
- No change to the balance of sustainability metrics from last year. NPP and sustainability targets remain equally weighted at 15% of the total PSP. Sustainability targets aligned to key 2030 sustainability ambitions.
- Performance period 1 January 2022 to 31 December 2024.
- Revision to the EVA underpin to a more discretionary basis, taking into account the changes to the capital allocation strategy following the divestment of the majority of the PTIC businesses.
- When assessing outcomes, the Committee applies the Discretion Framework which considers, for example, the management of ROIC, health and safety and sales growth and may adjust awards if it considers appropriate.
- An additional two-year holding period will apply for any shares vesting.
- Malus and clawback provisions apply.

Pension

20% of salary as pension supplement aligned to UK workforce.

D. Directors' remuneration for the year ended 31 December 2021 – Audited information

In this section

1. Directors' remuneration for the year ended 31 December 2021

Elements of remuneration

Executive Directors' remuneration

Executive Director	Steve Foots		Jez Maiden	
	2021	2020	2021	2020
Salaries	£682,340	£675,584	£470,579	£465,920
Benefits[1]	£24,939	£33,642	£20,126	£20,117
Pension supplement[2]	£136,218	£130,992	£94,116	£93,184
Pension[3]	£417	£7,500	–	–
Total fixed pay	**£843,914**	**£847,718**	**£584,821**	**£579,221**
Annual bonus	£1,023,510	–	£588,224	–
Long-term incentives[4A-B]	£2,556,242	£692,540	£1,322,175	£358,215
Other[5]	£3,618	£3,119	£3,975	£1,830
Total variable pay	**£3,583,370**	**£695,659**	**£1,914,374**	**£360,045**
Single total figure of remuneration	**£4,427,284**	**£1,543,377**	**£2,499,195**	**£939,266**

1. Benefits include benefit-in-kind for company car or cash allowance, benefit-in-kind for private medical insurance and private fuel allowance.
2. This represents the 20% of salary supplement. For January 2021 the supplement for Steve Foots was only in relation to benefits provided above the salary pension cap.
3. For defined benefit pensions the amount included is the additional value accrued during the year, calculated using HMRC's methodology for the purposes of income tax using a multiplier of 20. This methodology can result in year-on-year fluctuations due to underlying inflation inputs. In 2020, the calculation methodology was amended to align the revaluation rate that is applied to value Steve Foots' Croda Pension Scheme benefits to the inflation rate that is allowed for within the calculation of the disclosable benefit. This reduces the level of volatility in the calculated figure from year to year. Steve Foots was only an active member of the Croda Pension Scheme for one month in 2021.
4. A. The PSP awards granted in March 2019 reached the end of their performance period on 31 December 2021. The awards will vest at 97.4% of maximum (see page 98). The values included in the table above are based on the three-month average price to 31 December 2021 of 9545.7p. Of these values, £1,266,031 and £654,834 is attributable to share price growth for Steve Foots and Jez Maiden, respectively. These values will be updated in next year's Annual Report based on the share price at vesting which will take place on 14 March 2022.
   B. The PSP award included in the 2020 single figure (the 2018-20 PSP award) has been updated to reflect the actual share price at vesting of 6205p. Of these values, £178,130 and £92,137 is attributable to share price growth for Steve Foots and Jez Maiden, respectively.
5. Represents the value received in the year from participation in all-employee share schemes. Steve Foots and Jez Maiden received 24 and 23 matching shares respectively as part of the Share Incentive Plan (SIP) with a transaction value of £1,823 and £1,742. Steve Foots and Jez Maiden also participated in the 2021 Sharesave Scheme and were granted 98 and 122 shares respectively at a discounted rate of 7327p. The share price on the date of grant was 9158p representing a 20% discount.

Annual bonus

The annual bonus for Executive Directors in 2021 was calculated by reference to the amount by which the profit for the year exceeded the profit for 2020 (the 'Bonusable Profit'). Bonuses for 2021 are payable against a graduated scale once the Bonusable Profit exceeds the base profit with bonus targets set, and performance measured, based on constant currency actual exchange rates. Considering the unique nature of the business, the profit from our lipid system sales for our principal COVID-19 vaccine contract contract, has been excluded from the Bonusable Profit calculation. In line with our usual practice, profit contributions from in-year acquisitions (e.g. Parfex and Alban Muller) are excluded from the calculation to ensure a like-for-like comparison with the base year.

Executive Director	Threshold target	Maximum target	Actual	Bonus outcome (% of maximum)
Bonusable Profit	£384.8m	£423.3m	£477.5m	100%

The Remuneration Committee has discretion to reduce (including to zero) the amount of any payment under the scheme if it considers the safety, health or environment (SHE) performance is in serious non-compliance with the Croda SHE policy statement document of minimum standards. In addition, the Committee can also reduce any payment (including to zero) if it considers the underlying business performance of the Company is not sufficient to support the payment of any bonus. The Committee also applies the Discretion Framework, a rigorous framework for the application of judgement and discretion, when reviewing awards (see page 89).

The Committee used the Discretion Framework to satisfy itself that performance was robust and sustainable. The Committee therefore determined that 100% of the senior annual Bonus Plan was payable.

One third of the bonus payable will be deferred into shares for three years.

PSP

PSP awards vesting in March 2022

The PSP awards granted in March 2019 reached the end of their three-year performance period on 31 December 2021.

Measure	Weighting	Threshold	Maximum	Actual performance	Out-turn (% of max element)
Relative TSR versus bespoke peer group[1]	40%	Median (50th percentile)	Upper quartile (75th percentile)	89.4 percentile	100%
Adjusted annual average EPS growth over three years[2]	40%	5% p.a.	11% p.a.	10.5% p.a.	93.5%
NPP	20%	Target vesting for NPP sales growth to be at least twice non-NPP sales, subject to a minimum average of 5% growth per year and overall positive Group profit growth.		3.8x	100%
				Total out-turn	97.4%

1. TSR peer group constituents: AkzoNobel, Albemarle, Arkema, Ashland, BASF, Clariant, Koninklijke DSM, Eastman Chemicals, Elementis, Evonik Industries, Givaudan, Johnson Matthey, Kemira, Lanxess, Novozymes, Solvay, Symrise, Synthomer, Victrex.
2. EPS growth p.a. is calculated on a simple average basis over the three-year period; and therefore growth of 33% or more over three years is required for maximum vesting.

As well as considering the EPS, TSR and NPP targets, under the rules of the PSP, the Remuneration Committee is obliged to consider the underlying performance of the Company over the performance period, which it did using the Discretion Framework on page 89. On review, the Committee considered the outcome of the PSP consistent with overall Company performance over the three-year performance period.

The forecast vesting value of the awards made in March 2019, subject to the above performance targets, is included in the 2021 single figure table on page 97. Any shares vesting will be subject to a two-year holding period.

Gains made on exercise of share options and PSP

The gains are calculated according to the market price of Croda International Plc ordinary shares on the date of exercise, although the shares may have been retained.

Executive Director	Exercise date	Shares exercised	Scheme	Exercise price	Market price	Gain (before tax)
Steve Foots	15 Mar-21	11,161	PSP	0	6205p	£692,540
	15 Mar-21	5,581	DBSP	0	6205p	£346,301
	22 Mar-21	174	Sharesave	3092p	6257p	£5,507
	01 Nov-21	173	Sharesave	4144p	9432p	£9,148
	09 Mar-20	19,616	PSP	0	4259p	£835,445
	09 Mar-20	7,593	DBSP	0	4259p	£323,386
Jez Maiden	15 Mar-21	5,773	PSP	0	6205p	£358,215
	15 Mar-21	3,207	DBSP	0	6205p	£198,994
	01 Nov-21	217	Sharesave	4144p	9432p	£11,475
	09 Mar-20	10,146	PSP	0	4259p	£432,118
	09 Mar-20	4,187	DBSP	0	4259p	£178,324

PSP awards granted in 2021

The PSP awards granted on 24 March 2021 were as follows:

Executive Director	Number of PSP shares awarded	Basis of award granted (% of salary)	Face/maximum value of awards at grant date[1]	% of award vesting at threshold (maximum)	Performance period
Steve Foots	24,422	225%	£1,535,240	25% (100%)	01.01.21 – 31.12.23
Jez Maiden	13,100	175%	£823,505	25% (100%)	01.01.21 – 31.12.23

1. Face value/maximum value is calculated based on a share price of 6286.3p, being the average mid-market share price of the three dealing days prior to the date of grant.

The 2021 PSP awards are subject to a performance condition which is split into three parts: 35% EPS, 35% TSR, and 30% sustainability metrics, including NPP. Performance targets were disclosed in full last year, see page 90 of our Annual Report and Accounts 2020. Vesting will take place on a sliding scale. An EVA underpin applies across the entire award, also detailed on page 90 of our Annual Report and Accounts 2020.

Any shares vesting will be subject to a two-year holding period.

All-employee share plans

Executive Directors are invited to participate in the HMRC tax-approved UK Sharesave Scheme and the Croda Share Incentive Plan (SIP) in line with, and on the same terms as, the wider UK workforce.

SIP

Details of shares purchased and awarded to Executive Directors under the SIP are shown in the table below. A brief description of the SIP is set out in note 23 on page 156.

Executive Director	SIP shares held 01.01.21	Partnership shares acquired in year	Matching shares awarded in year	Total shares 31.12.21*	SIP shares that became unrestricted in the year	Total unrestricted SIP shares held at 31.12.21
Steve Foots	5,794	24	24	5,842	78	5,540
Jez Maiden*	429	23	23	481	103	107

There have been no changes in the interests of any Director between 31 December 2021 and the date of this report, except for the purchase of 4 SIP shares and the award of 4 matching shares by Steve Foots and Jez Maiden during January and February 2022.

* Jez Maiden also had six additional shares acquired through the Dividend Reinvestment Plan.

Sharesave

Details of awards made under the UK Sharesave Scheme are set out below:

Date of grant	Earliest exercise date	Expiry date	Face value*	Exercise price	Number at 01.01.21	Granted in year	Exercised in the year	Number at 31.12.21
Steve Foots								
13 September 2017	01 November 2020	30 April 2021	£6,725	3092p	174	–	174	–
27 September 2018	01 November 2021	30 April 2022	£8,960	4144p	173	–	173	–
12 September 2019	01 November 2022	30 April 2023	£6,723	3898p	138	–	–	138
10 September 2020	01 November 2023	30 April 2024	£6,724	4804p	112	–	–	112
16 September 2021	01 November 2024	30 April 2025	£8,975	7327p	–	98	–	98
					597	**98**	**347**	**348**
Jez Maiden								
27 September 2018	01 November 2021	30 April 2022	£11,238	4144p	217	–	217	–
12 September 2019	01 November 2022	30 April 2023	£11,206	3898p	230	–	–	230
16 September 2021	01 November 2024	30 April 2025	£11,173	7327p	–	122	–	122
					447	**122**	**217**	**352**

During 2021, the highest mid-market price of the Company's shares was 10365p and the lowest was 6095p. The year-end closing price was 10120p. The year-end mid-market price was 10045p.

* Face value is calculated using the market value on the day before the date of grant, multiplied by the number of shares awarded.

2. Pension

The pension rights that accrued during the year in line with the policy on such benefits as set out in the Policy Report were as follows:

Executive Director	Normal retirement date under the CPS	Total accrued pension at 31.12.21 (p.a.)	Single remuneration pension figure 2021	Single remuneration pension figure 2020	Single remuneration pension figure 2021 excluding supplement
Steve Foots	14 September 2033	£128,740	£136,635	£138,492	£417*
Jez Maiden	N/A	–	£94,116	£93,184	–

* Steve Foots was only an active member of the Croda Pension Scheme for one month in 2021.

Note: Members of the Croda Pension Scheme (CPS) have the option to pay voluntary contributions. Neither the contributions nor the resulting benefits are included in this table. During 2021, Steve Foots was paid £136,218 (2020: £130,992) and Jez Maiden was paid £94,116 (2020: £93,184) in addition to their basic salary to enable them to make independent provision for their retirement.

Croda has a number of different pension plans in the countries in which we operate. Pension entitlements for Executive Directors are tailored to local market practice, length of service and the participant's age. In 2016, a Career Average Revalued Earnings (CARE) scheme was introduced with a cap applied to pension benefits; at this time the cap was set at £65,000. The cap is increased each year in line with inflation, and from April 2022 will be £72,966. Employees who earn in excess of the pension cap or who cannot be members of the plan due to tax limitations receive a pension supplement. For Executive Directors this supplement is up to 20% of salary in line with the wider UK workforce.

Steve Foots' pension provision

Steve Foots accrued pension benefits under the CPS up to 31 January 2021 with a CARE accrual rate of 1/60th and an entitlement to retire at age 60. From 6 April 2011 onwards, pension benefits accruing were based on a capped salary. This cap was £187,500 until April 2014 at which point it reduced to £150,000, and due to annual allowance regulations and changes to the pension scheme, reduced to £37,500 in April 2016 (reduced from the scheme cap of £65,650 due to annual allowance regulations) and reduced again in April 2020 to £15,000 following new annual allowance regulations. If Steve Foots retires before the age of 60, a reduction will be applied to the element of his pension accrued before 6 April 2006, unless he is retiring at the Company's request. In the event of death, a pension equal to two thirds of the Director's pension would become payable to the surviving spouse. Steve Foots' pension in payment is guaranteed to increase in line with the rate of inflation up to a maximum of 10% per annum for benefits accrued before 6 April 2006, and in line with inflation up to a maximum of 2.5% per annum for benefits accrued from 6 April 2006 onwards.

Steve Foots is entitled to death-in-service benefits from an Excepted Life Policy. Steve Foots elected to opt out of the Croda Pension Scheme from 31 January 2021 and therefore only now receives a pension supplement of 20% of salary. For January 2021 he also received a pension supplement at 20% of salary above his personal pension benefit cap in line with the wider UK workforce.

Jez Maiden's pension provision

Jez Maiden has elected not to join the Croda Pension Scheme and was therefore paid a pension supplement of 20% of salary in 2021. He is entitled to death-in-service benefits from an Excepted Life Policy.

3. Payments for cessation of office

There were no payments for loss of office during the year under review.

4. Payments to past Directors

There were no payments to past Directors during the year under review.

5. Share interests

The interests of the Directors who held office at 31 December 2021 are set out in the table below:

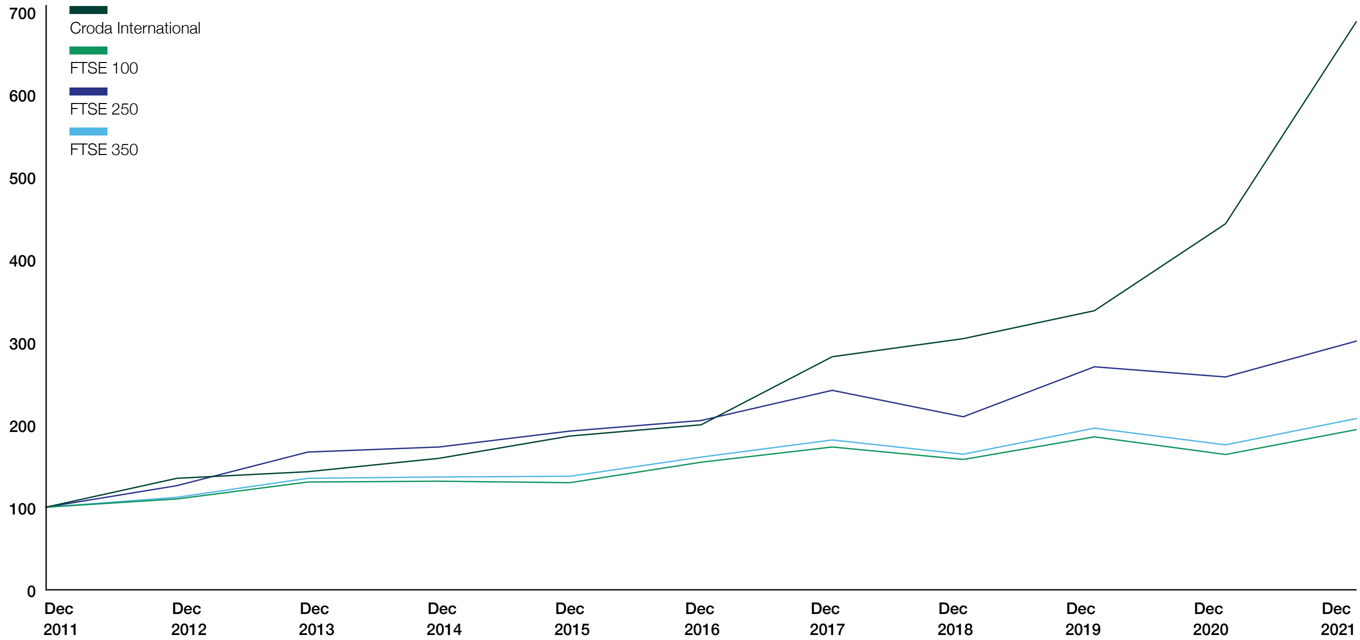
	Legally owned[1]					SIP			
	31.12.20	31.12.21	PSP (unvested)	DBSP (unvested)	Sharesave (unvested)	Restricted	Unrestricted	Total 31.12.21	% of salary held under shareholding guideline
Executive Director									
Steve Foots	163,912	173,115	83,449	2,526	348	302	5,540	265,280	>225% target
Jez Maiden	27,167	21,106	44,235	1,449	352	374	107	67,623	>175% target
Non-Executive Director									
Roberto Cirillo	–	–	–	–	–	–	–	–	–
Jacqui Ferguson	76	76	–	–	–	–	–	76	–
Anita Frew	9,425	9,425	–	–	–	–	–	9,425	–
Helena Ganczakowski	361	361	–	–	–	–	–	361	–
Keith Layden	80,314	60,339	–	–	–	–	–	60,339	–
John Ramsay	2,000	2,000	–	–	–	–	–	2,000	–
Julie Kim*	–	60	–	–	–	–	–	60	–

* Julie Kim appointed 1 September 2021, holding on appointment Nil.
1. Including connected persons.

Post-employment shareholding guidelines also apply for two years after leaving employment. These are set at 100% of the in-employment guideline for the first year after leaving employment, tapering to 0% by the end of year two. This policy applies to shares from awards that vest in 2020 and beyond. The Committee is implementing structures to ensure that post-employment shareholding guidelines are adhered to, by the placing of restrictions on the sale of shares via our third-party share plan administrator.

6. Performance graph (unaudited information)

Ten year Total Shareholder Return chart



Source: Thomson Reuters Datastream

7. Ten year remuneration figures for Group Chief Executive (unaudited information)

The total remuneration figure includes the annual bonus and long-term incentive awards which vested based on performance in those years. The annual bonus and long-term incentive award percentages show the payout for each year as a percentage of the maximum.

	2012	2013	2014	2015	2016	2017	2018	2019	2020[1]	**2021**
Total remuneration (£)	1,364,048	1,427,156	769,414	1,374,046	2,404,441	3,570,251	3,311,700	1,693,242	1,543,377	**4,427,284**
Annual bonus (%)	28%	0%	0%	76.38%	100%	78.36%	36.19%	0%	0%	**100%**
Long-term incentives vesting (%)	100%	81.8%	0%	0%	43%	100%	100%	56.2%	40%	**97.4%**

1. The 2020 total remuneration figure has been updated to reflect the value of the 2020 PSP award at vesting.

8. Board Chair and other Non-Executive Directors' fees 2021 and 2022 (unaudited information)

The fees paid to the Non-Executive Directors (including chairing of Committees) and to the Senior Independent Director were reviewed in December 2021 and increased by 5%, in line with the UK workforce. These changes took effect from 1 January 2022. The revised fee structure for the Board Chair and other Non-Executive Directors for 2022 is detailed below.

Position	2021 fee £	2022 fee £
Board Chair (all-inclusive fee)	303,909	319,104
Non-Executive Director base fee	63,872	67,066
Additional fees		
Senior Independent Director	10,611	11,142
Committee Chairs (Audit and Remuneration)	15,453	16,226

9. Non-Executive Directors' remuneration

The remuneration of Non-Executive Directors for the year ended 31 December 2021 payable by Group companies is detailed below; this table reflects actual payments in 2021.

		Non-Executive Director fees £	Benefits[1] £	Total £
Anita Frew	**2021**	**303,909**	**11**	**303,920**
	2020	300,900	–	300,900
Alan Ferguson[2]	**2021**	–	–	–
	2020	28,084	–	28,084
Helena Ganczakowski[3]	**2021**	**89,937**	**456**	**90,393**
	2020	85,789	–	85,789
Jacqui Ferguson	**2021**	**63,873**	**169**	**64,042**
	2020	63,240	–	63,240
Roberto Cirillo	**2021**	**63,873**	**903**	**64,776**
	2020	63,240	–	63,240
Keith Layden	**2021**	**63,873**	**89**	**63,962**
	2020	63,240	–	63,240
John Ramsay[3,4]	**2021**	**79,326**	**794**	**80,120**
	2020	73,793	–	73,793
Julie Kim[5, 6]	**2021**	–	**11,142**	**11,142**
	2020	–	–	–

1. The benefits relate to Directors undertaking business travel on behalf of Croda and ensuring the Directors are not out of pocket for related tax.
2. Alan Ferguson retired on 23 April 2020. His fees were pro-rated accordingly.
3. Following Alan Ferguson's retirement, Helena Ganczakowski was appointed as the Senior Independent Director and John Ramsay was appointed as the Chair of the Audit Committee. Their fees were pro-rated accordingly.
4. John Ramsay was appointed to the Board on 1 January 2020.
5. Julie Kim was appointed to the Board on 1 September 2021 and has voluntarily decided to waive her fees.
6. The benefits figure for Julie Kim relates to the undertaking of long-haul business travel and ensuring she is not out of pocket for the related tax.

Non-Executive Directors' appointment

The effective dates of the letters of appointment for the Board Chair and each Non-Executive Director who served during 2021 are shown in the table below:

Non-Executive Director	Original appointment date	Expiry date of current term
Anita Frew	05 March 2015	05 March 2023
Roberto Cirillo	26 April 2018	26 April 2024
Jacqui Ferguson	01 September 2018	01 September 2024
Helena Ganczakowski	01 February 2014	31 January 2023
Keith Layden	01 May 2017	01 May 2023
John Ramsay	01 January 2020	01 January 2023
Julie Kim	01 September 2021	01 September 2024

10. Service contracts and outside interests (unaudited information)

The Executive Directors have service contracts as follows:

Executive Director	Contract date	Termination provision
Steve Foots	16 September 2010	by the Company 12 months, by the Director 6 months
Jez Maiden	09 October 2014	by the Company 12 months, by the Director 6 months

External directorships

Executive Directors are permitted to accept external appointments with the prior approval of the Board. It is normal practice for Executive Directors to retain fees provided for Non-Executive Director roles. Neither Executive Director held any external directorships during 2021.

11. Remuneration Committee attendance and advisers (unaudited information)

The following Directors served as members of the Committee during 2021:

- Helena Ganczakowski (Chair)
- Roberto Cirillo
- Jacqui Ferguson
- John Ramsay
- Julie Kim (From 01 September 2021)

See page 72 for details of attendance at meetings during the year.

In addition, the Committee invites individuals to attend meetings to ensure that decisions are informed and take account of pay and conditions in the wider Group. During 2021, invitees included other Directors and employees of the Group and the Committee's advisers (see page 103), including Anita Frew (Company Chair), Steve Foots (Group Chief Executive), Jez Maiden (Group Finance Director), Keith Layden (Non-Executive Director), Tracy Sheedy (Group HR Director), Tom Brophy (Group General Counsel and Company Secretary) and Caroline Farbridge (Deputy Company Secretary).

Attendees at Committee meetings are excluded from discussions that determine their own remuneration.

Summary of Remuneration Committee meetings

January 2021	Approved Chair fee increase for 2021
	Reviewed the draft Directors' Remuneration Report
	Considered shareholder feedback on executive remuneration arrangements ahead of implementation in 2021
	Considered the sustainability targets for 2021 PSP awards
February 2021	Reviewed the draft Directors' Remuneration Report
	Approved the calculation of the 2020 senior annual Bonus Plan award
	Approved the senior annual Bonus Plan targets for 2021
	Approved the vesting outcome for the 2018 PSP awards
	Approved the PSP targets for 2021 and the grant of PSP awards for 2021
	Approved the vesting of the 2018 Restricted Share Plan awards and the grant of Restricted Share Plan awards for 2021
	Reviewed feedback from employee listening groups attended by the Remuneration Committee Chair
	Approved the introduction of the Free Share Plan
	Reviewed Executive Committee salary increases
	Reviewed the update on ABI headroom limits as they apply to the business
	Reviewed share ownership guidelines
	Reviewed the Committee's Terms of Reference
	Considered the mechanism for enforcement of the post-employment shareholding guideline
April 2021	Reviewed shareholder feedback on Directors' Remuneration Report
	Reviewed an update on PSP sustainability targets
	Reviewed the rules of the Free Share Plan and timeline for grant
	Gave authority for UK employees to join the UK Sharesave Scheme and non-UK employees to join the International Sharesave Scheme
	Agreed dividend enhancement to the Deferred Bonus Share Plan
November 2021	Considered mechanism for enforcement of the post-employment shareholding guideline
	Considered Free Share Plan accounting treatment
	Reviewed forecast outcomes for 2021
	Considered and reviewed remuneration trends
	Reviewed quality assessment process for 2020 sustainability targets
	Reviewed workforce remuneration
	Agreed dividend enhancement to the Deferred Bonus Share Plan
	Gave authority for the execution of actions in relation to the 2018 Sharesave maturity
	Approved amendments to International Sharesave Plan rules
December 2021	Reviewed initial draft of the Chair's letter for inclusion in the Directors' Remuneration Report
	Reviewed proposed targets for the 2022 senior annual Bonus Plan and PSP award
	Approved salary increases for Chief Executive and Executive Committee
	Considered and reviewed proposed treatment of incentives for employees transferring out of the business following the sale of the majority of the PTIC businesses
	Considered the Committee's effectiveness review

Remuneration Committee advisers (unaudited information)

Deloitte LLP were retained as the appointed adviser to the Committee for the whole of 2021 having been appointed in October 2017, following a tender and selection process led by the Chair and including Committee members. As well as providing advice in relation to Executive remuneration and Non-Executive fees, Deloitte LLP also provide advice to the Group in relation to global employer services, global business tax services, indirect tax and M&A. Deloitte LLP is a signatory to the Remuneration Consultants Group Code of Conduct. The lead engagement partner has no other connection with the Company or individual Directors. The total fees paid to Deloitte LLP for its services during the year in relation to Executive remuneration and Non-Executive fees were £36,650 (excluding VAT). The Committee regularly reviews the external adviser's relationship and is comfortable that the advice it is receiving remains objective and independent.

12. Other disclosures (unaudited information)

Percentage change in remuneration levels

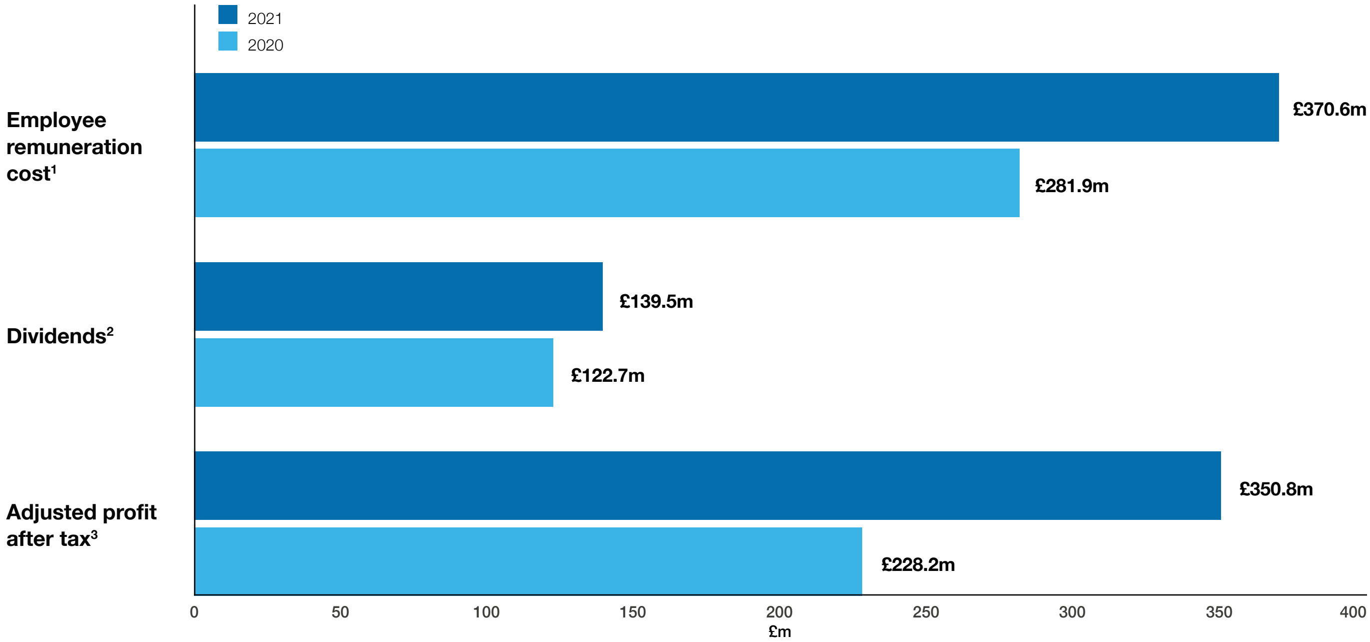
The following chart shows the movement in salary/fees, benefits and annual bonus for each of the Group's Directors between the current and previous financial year compared with that of the average employee of the Group's parent Company. The movement for the average UK employee is also provided for additional reference given the small number of employees employed by the Group parent Company.

		% change in salary / fees[1]	% change in benefits[2]	% change in bonus[3,4]
Average employee of the Group's parent Company[5]	2021	-5.12%	-25.04%	–
	2020	3.66%	-0.06%	0.00%
Average UK employee[5]	2021	0.68%	-8.63%	–
	2020	3.43%	-3.27%	27.96%
Executive Directors				
Steve Foots	2021	1.00%	-25.87%	–
	2020	2.00%	0.50%	0.00%
Jez Maiden	2021	1.00%	0.04%	–
	2020	2.00%	2.29%	0.00%
Non-Executive Directors				
Anita Frew	2021	1.00%	–	–
	2020	2.00%	-100.00%	–
Roberto Cirillo	2021	1.00%	–	–
	2020	2.00%	-100.00%	–
Alan Ferguson[6]	2021	-100.00%	–	–
	2020	-67.83%	-100.00%	–
Jacqui Ferguson	2021	1.00%	–	–
	2020	2.00%	-100.00%	–
Helena Ganczakowski[7]	2021	4.84%	–	–
	2020	11.41%	-100.00%	–
Keith Layden	2021	1.00%	–	–
	2020	2.00%	-100.00%	–
John Ramsay[7,8]	2021	7.50%	–	–
	2020	–	–	–
Julie Kim[9]	2021	–	–	–
	2020	–	–	–

1. Employees of the Group's parent Company and UK employees received a 1% pay increase in 2021; an additional 1% increase was awarded to the majority of the UK workforce in July 2021, excluding all Board Directors and those in our most senior grades. Executive Directors and Non-Executive Directors received a 1% pay increase. The % decrease in the salary of the Average employee of the Group's parent Company relates to an increase in headcount of the Group's parent Company. This increase in headcount of more junior employees has driven the average salary down.
2. The benefits for Non-Executive Directors relate to the undertaking of business travel on behalf of Croda and ensuring the Directors are not out of pocket for related tax. No taxable business travel expenses were claimed by Non-Executive Directors in 2020 due to the COVID-19 pandemic and therefore there are no comparable figures to give a % change in 2021. To see the actual value of benefits for Non-Executive Directors in 2021 please see page 101.
3. For 2021, the senior annual Bonus Plan and Croda Europe Discretionary Board Scheme both paid out in full. These schemes however did not pay out for 2019 or 2020 and therefore there is no comparable figure to give a % change in 2021 for Executive Directors or the Average employee of the Group's parent Company. In respect of the Average UK employee, the % change in 2020 relates to a small number of employees who received a sales bonus. As the senior annual Bonus Plan and Croda Europe Discretionary Bonus Scheme paid out in full for 2021, the actual amount received by the average UK employee is significantly higher and as such the % change would be misleading.
4. Bonus including annual bonus, DBSP and sales bonus.
5. Excluding Executive Directors and Non-Executive Directors.
6. Alan Ferguson retired on 23 April 2020.
7. In 2020 following Alan Ferguson's retirement, Helena Ganczakowski was appointed as the Senior Independent Director and John Ramsay was appointed as the Chair of the Audit Committee. Their fees were pro-rated accordingly.
8. John Ramsay was appointed to the Board on 1 January 2020 and therefore has no comparable remuneration figures for 2019.
9. Julie Kim appointed to the Board 1 September 2021 and therefore has no comparable remuneration figures for 2020.

Relative importance of the spend on pay

The chart below shows the movement in spend on staff costs versus that in dividends and adjusted profit after tax.



1. Employee remuneration costs, as stated in the notes to the Group accounts on page 138. These comprise all amounts charged against profit in respect of employee remuneration for the relevant financial year, less redundancy costs and share-based payments, both of which can vary significantly from year to year.
2. Dividends are the amounts payable in respect of the relevant financial year.
3. Adjusted profit after tax is profit for the relevant year adjusted for exceptional items, acquisition costs, amortisation of intangible assets arising on acquisition and the tax thereon.

13. Statement of voting (unaudited information)

	Remuneration Policy 2020 AGM		Annual Report on Remuneration 2021 AGM	
	number of votes	% of votes	number of votes	% of votes
Votes cast in favour	97,230,580	97.55%	109,189,937	98.82%
Votes cast against	2,445,834	2.45%	1,306,221	1.18%
Total votes cast	99,676,414	100%	110,496,158	100%
Withheld	152,926		16,449	

I will be available at the AGM to respond to any questions shareholders may raise on the Committee's activities.

On behalf of the Board

Helena Ganczakowski

Helena Ganczakowski
Chair of the Remuneration Committee

28 February 2022

E. Summary of the Remuneration Policy

An updated Remuneration Policy was presented and approved by shareholders at the 2020 AGM. It is intended that this will operate until the AGM in 2023. The full Remuneration Policy can be found on pages 77 to 83 of our Annual Report & Accounts 2019.

Main components of the Remuneration Policy

Operation	Maximum opportunity	Framework used to assess performance and for the recovery of sums paid
Basic salary – to assist in the recruitment and retention of high-calibre Executives		
Normally reviewed annually with increases effective from 1 January. Base salaries will be set by the Committee, considering: • The performance and experience of the individual concerned • Any change in scope, role and/or responsibilities • Pay and employment conditions elsewhere in the Group • Rates of inflation and market-wide wage increases across international locations • The geographical location of the Executive Director • Rates of pay in international manufacturing and pan-sector companies of a comparable size and complexity.	• Salaries may be increased each year in percentage of salary terms. • The Committee will be guided by the salary increase budget set in each region and across the workforce generally. • Increases beyond those linked to the region of the Executive Director or the workforce as a whole (in percentage of salary terms) may be awarded by the Committee at its discretion. For example, where there is a change in responsibility, experience or a significant increase in the scale of the role and/or size, value or complexity of the Group. • The Committee retains the flexibility to set the salary of a new hire at a discount to the market level initially, and to implement a series of planned increases in subsequent years, in order to bring the salary to the desired positioning, subject to individual performance.	• The Committee considers individual salaries taking due account of the relevant factors set out in this Policy, which includes individual performance.
Benefits – to provide competitive benefits to act as a retention mechanism and reward service		
The Group typically provides the following benefits: • Company car (or cash allowance) • Private fuel allowance • Private health insurance and other insured benefits • Other ancillary benefits, including relocation expenses/arrangements (including tax thereon) as required. Additional benefits might be provided from time to time (for example in circumstances where an Executive Director is deployed to, or recruited from overseas). The Committee will consider whether the payment of any additional benefits is appropriate and proportionate when determining whether they are paid.	• The cost of benefits is not pre-determined and may vary from year to year based on the cost to the Group.	None.

Operation	Maximum opportunity	Framework used to assess performance and for the recovery of sums paid
Performance-related annual bonus – to incentivise and reward delivery of the Group's key annual objectives and to contribute to longer-term alignment with shareholders		
Normally one third of any bonus paid is compulsorily deferred into shares for three years through the Deferred Bonus Share Plan (DBSP). The Committee has the discretion to permit DBSP awards to benefit from dividends on shares that vest. The balance of the bonus is paid in cash.	Group Chief Executive: 150% of salary. Other Executive Director: 125% of salary.	• Bonus will typically be based on challenging financial targets set in line with the Group's KPIs (for example profit growth targets). • The Committee has the flexibility to include, for a minority of the bonus, targets related to other Group measures where this is considered appropriate. • For a profit measure, bonus normally starts to accrue once the threshold target is met (0% payable) rising on a graduated scale to 100% for outperformance. Were an additional KPI metric to be introduced, the threshold would not exceed 25%. • The Committee applies a Discretion Framework, which includes health, safety and environmental performance when determining the actual overall level of individual bonus payments and it may adjust the bonus awards if it considers it appropriate to do so. • Bonuses paid are subject to provisions that enable the Committee to recover value overpaid through the withholding of variable pay previously earned or granted (malus) or through requesting a payment from an individual (clawback) in the event of a misstatement of results, serious misconduct, serious reputational damage or material corporate failure. The provisions will operate for a three-year period following the date on which the bonus is paid.
Performance Share Plan (PSP) – to incentivise and reward the execution of business strategy over the longer term and to reward sustained growth in profit and shareholder value		
The PSP provides for awards of free shares (i.e., either conditional shares or nil-cost options) normally made annually which vest after three years subject to continued service and the achievement of challenging performance conditions. Shares are subject to a two-year post-vesting holding period. The Committee has the discretion to permit awards to benefit from the dividends paid on shares that vest.	Normal maximum opportunity of: • Group Chief Executive: 225% of salary • Other Executive Director: 175% of salary. In exceptional circumstances (eg recruitment), awards may be granted up to 300% of salary to compensate for value forfeited from a previous employer.	• Granted subject to a blend of challenging financial (eg EPS), shareholder return (eg relative TSR) and strategic targets (eg sustainability). The performance targets may also include an additional underpin (eg an EVA underpin). • Targets will normally be tested over three years. • In relation to financial targets (eg EPS growth and TSR) 25% of awards subject to such targets will vest for threshold performance with a graduated scale operating through to full vesting for equalling, or exceeding, the maximum performance targets (no awards vest for performance below threshold). In relation to strategic targets or underpin targets, the structure of the target will vary based on the nature of target set (eg for milestone strategic targets it may not always be practicable to set such targets using a graduated scale and so vesting may take place in full for strategic targets if the criteria are met in full). • Vesting is also dependent on application of the Discretion Framework, including satisfactory underlying financial performance of the Group over the performance period and the Committee may adjust outcomes if it considers it appropriate to do so. • There are also provisions that enable the Committee to recover value overpaid through the withholding of variable pay previously earned or granted (malus) or through requesting a payment from an individual (clawback) in the event of a misstatement of results, serious misconduct, serious reputational damage or material corporate failure. The provisions will operate for a three-year period following the date on which the PSP awards vest.

Operation	Maximum opportunity	Framework used to assess performance and for the recovery of sums paid
All-employee share plans – to encourage retention and long-term shareholding in the Company and to provide all employees with the opportunity to become shareholders in the Company on similar terms		
• Periodic invitations are made to participate in the Group's Sharesave scheme and Share Incentive Plan. • Shares acquired through these arrangements have significant tax benefits in the UK subject to satisfying certain HMRC requirements. • The plans can only operate on an all-employee basis. • The plans operate on similar terms but on a non tax-favoured basis outside the UK as appropriate. • In the event that Croda were to introduce an all-employee plan similar in nature to the current Sharesave and Share Incentive Plan, the Committee retains the discretion to allow Executive Directors to participate on the same basis as other employees.	• In relation to HMRC plans (or equivalent) the maximum participation level is as per HMRC limits. For any other all-employee plan the maximum will be equivalent to the maximum applying to all employees.	• There are no post-grant targets currently applicable to the Group's Sharesave and Share Incentive Plan.
Pension – to provide competitive long-term retirement benefits and to act as a retention mechanism and reward service		
Pension benefits are typically provided either through (i) participation in the UK's defined benefit pension plan with a cash supplement provided above any pension salary cap or (ii) a cash supplement provided in lieu of pension. Only basic salary is pensionable.	• Career average revalued earnings scheme (CARE) with a maximum 1/60th accrual up to a capped salary plus cash allowance of 20% of salary above the cap or cash allowance of 20% of salary.	None.

Legacy arrangements

For the current CEO, and in line with other employees, there is a legacy capped defined benefit pension scheme. While there are no future accruals, the arrangement remains inflation-linked.

Other disclosures

Pages 58 to 111 inclusive, together with the sections of the Annual Report and Accounts incorporated by reference, constitute a Directors' report that has been drawn up and presented in accordance with applicable English company law; the liabilities of the Directors in connection with that report are subject to the limitations and restrictions provided by that law.

Research and development

Research and development activities are undertaken with the prospect of gaining new scientific or technical knowledge and understanding.

Dividends

The Directors are recommending a final dividend of 56.5p per share (2020: 51.5p). If approved by shareholders, total dividends for the year will amount to 100.0p per share (2020: 91.0p). Details of dividends are shown in note 8 on page 137; details of the Company's Dividend Reinvestment Plan can be found on page 171. The Company has established various Employee Benefit Trusts (EBTs) in connection with the obligation to satisfy future share awards under employee share incentive schemes. The trustees of the EBTs have waived their rights to receive dividends on certain Ordinary Shares of the Company held in the EBTs. Such waivers represent less than 1% of the total dividend payable on the Company's Ordinary Shares. Further details of the EBTs can be found in note 25 on page 160.

Directors

The Company's Articles of Association (Articles) give the Directors power to appoint and replace Directors. Under the terms of reference of the Nomination Committee, any appointment must be recommended by the Nomination Committee for approval by the Board of Directors. The present Directors of the Company are shown on pages 62 and 63.

In line with the 2018 UK Corporate Governance Code, each Director will be standing for election or re-election at the AGM. Details of the Directors' service contracts are given in the Directors' Remuneration Report on page 102.

Apart from the share option schemes, long term incentive schemes and service contracts, no Director had any beneficial interest in any contract to which the Company or a subsidiary was a party during the year. A statement indicating the beneficial and non-beneficial interests of the Directors in the share capital of the Company, including share options, is shown in the Directors' Remuneration Report on page 100.

The Directors are responsible for managing the business of the Company and may exercise all the powers of the Company subject to the provisions of relevant statutes, the Company's Articles and any directions given by special resolution.

Directors' indemnities

The Company maintains Directors' and Officers' liability insurance that gives appropriate cover for any legal action brought against its Directors. The Company has also granted indemnities to each of its Directors and the Company Secretary, which represent 'qualifying third party indemnity provisions' (as defined by Section 234 of the Companies Act 2006), in relation to certain losses and liabilities that the Directors or Company Secretary may incur to third parties in the course of acting as Directors or the Company Secretary or as employees of the Company or of any associated company. In addition, such indemnities have been granted to other officers of the Company who are Directors of subsidiary companies within the Group. Such indemnities were in place during 2021 and at the date of approval of the Group financial statements.

Share capital

At the date of this report, 142,536,884 Ordinary Shares of 10.609756p each have been issued and are fully paid up and quoted on the London Stock Exchange. At the date of this Report, the Company has issued and fully paid up 21,900 7.5% Cumulative Preference Shares, 498,434 6.6% Cumulative Preference Shares and 615,562 5.9% Cumulative Preference Shares, all of £1 each (the Preference Shares). The rights and obligations attached to the Company's Ordinary Shares and Preference Shares are set out in the Articles, copies of which can be obtained from Companies House in the UK or by writing to the Company Secretary. There are no restrictions on the voting rights attached to the Company's Ordinary Shares or on the transfer of securities in the Company. The 7.5% Cumulative Preference Shares do not confer on the holders any right to receive notice of or to be present or to vote at any general meeting of the Company unless the cumulative preferential dividend on such shares is more than 12 calendar months in arrears. The 6.6% and 5.9% Cumulative Preference Shares do not confer on the holders any right to receive notice of or to be present or to vote at any general meeting of the Company, unless the cumulative preferential dividend on such shares is more than six calendar months in arrears or the business of the general meeting includes the consideration of a resolution for reducing the share capital of the Company, to sell the undertaking of the Company or to alter the Articles. No person holds securities in the Company that carry special rights with regard to control of the Company. The Company is not aware of any agreements between holders of securities that may result in restrictions on the transfer of securities or on voting rights.

Power to issue or buy back shares

At the 2021 AGM, authority was given to the Directors to allot unissued shares in the Company up to a maximum amount equivalent to approximately one third of the issued share capital, excluding shares held in treasury, for general purposes, plus up to a further one third of the Company's issued share capital, excluding shares held in treasury, but only in the case of a rights issue.

A further special resolution passed at that meeting granted authority to the Directors to allot equity securities in the Company for cash, without regard to the pre-emption provisions of the Companies Act 2006. Both of these authorities expire on the date of the 2022 AGM, that is 20 May 2022, and so the Directors propose to renew them for a further year.

Substantial Shareholdings

As at 31 December 2021 in accordance with DTR 5 the holders of notifiable interests in the Company's share capital had not changed since the information declared in the 2020 Annual Report and are shown in the table below.

	Number of shares	% of issued capital
Massachusetts Financial Services Company	12,551,036	9.73%
BlackRock, Inc.	8,534,795	6.62%
Mawer Investment Management Limited	6,438,386	4.99%
Royal Bank of Canada	5,212,886	4.04%

Since the year end and up to the date of this report the following information has been received.

	Number of shares	% of issued capital
Royal Bank of Canada	5,093,443	3.65%
Norges Bank	4,186,185	3.00%

Employees

Diversity: We are committed to the principle of equal opportunity in employment and to ensuring that no applicant or employee receives less favourable treatment on the grounds of any protected characteristic or is disadvantaged by conditions or requirements that cannot be shown to be justified. Group human resources policies are clearly communicated to all of our employees and are available through the Company intranet.

Recruitment and progression: It is established policy throughout the Business that decisions on recruitment, career development, promotion and other employment related issues are made solely on the grounds of individual ability, achievement, expertise and conduct.

We give full and fair consideration to applications for employment from people with disabilities, having regard to their particular aptitudes and abilities. Should an employee become disabled during their employment with the Company, they are fully supported by our Occupational Health provision. Efforts are made to continue their employment with reasonable adjustments being made to the workplace and role where feasible. Retraining is provided if necessary.

Development and learning: The Company recognises that the key to future success lies in the skills and abilities of its dedicated global workforce. The continuous development of all of our employees is key to meeting the future demands of our customers, especially in relation to enhanced creativity, innovation and customer service.

Involvement: We are committed to ensuring that employees share in the success of the Group. Owning shares in the Company is an important way of strengthening involvement in the development of the Business and bringing together employees and shareholders' interests. In 2021, 84% of our UK employees and 60% of our non-UK employees participated in one of our all-employee share plans, indicating employees' continued desire to be involved in the Company.

Employees are kept informed of matters of interest to them in a variety of ways, including the Company magazine, Croda Way; quarterly updates; the Company intranet, Connect; team briefings, podcasts, webinars, Yammer and Croda Now email messages. These communications help achieve a common awareness of the financial and economic factors affecting the performance of Croda and of changes within the Business. We are committed to providing employees with opportunities to share their views and provide feedback on issues that are important to them. The Directors maintain oversight of employee matters through the Board and committee meeting processes and information flows, including regular updates on employee matters and employee feedback received through employee engagement surveys. How the Directors have engaged with employees and have considered their interests when taking key decisions is further detailed on pages 69 and 70.

Non-financial reporting directive

The Companies, Partnerships and Groups (Accounts and Non-Financial Reporting) Regulations 2016 (the Regulations) require companies to disclose non-financial information necessary to provide investors and other stakeholders with a better understanding of a company's development, performance, position and impact of its activity. Throughout this Annual Report the Directors have disclosed a mix of financial and non-financial KPIs which they believe best reflect the Group's strategic priorities, and which will help to convey an understanding of the culture of the business and the drivers which contribute to the ongoing success of the Company. Please see the non-financial information statement on page 38 which sets out where stakeholders can find information relating to non-financial matters.

Mandatory XBRL tagging

The Board reviewed the process that had been developed to ensure that the primary financial statements had been tagged in line with required taxonomy.

Other disclosures

Certain information that is required to be included in the Directors' Report can be found elsewhere in this document as referred to below, each of which is incorporated by reference into the Directors' Report:

- Information on greenhouse gas emissions can be found on page 39.
- Information on energy consumption can be found on page 39.
- Information on energy efficiency can be found on page 39.
- Information on gas emissions, energy consumption and energy efficiency - other disclosures can be found on page 39.
- For the purposes of Listing Rule (LR) 9.8.6R(8) the information on climate-related financial disclosures consistent with the TCFD recommendation and the TCFD recommended disclosure can be found on pages 40 to 41.
- Further details of the actions which the Group is taking to reduce emissions can also be found in the Sustainability Report and at www.Croda.com.
- An indication of likely future developments in the Group's business can be found throughout the Strategic Report, starting on page one.
- The long-term viability statement can be found on pages 56 and 57.
- Information on the appropriateness of adopting the going concern basis of the accounts can be found on page 125.
- Our approach to risk management can be found on pages 50 to 55.
- Details of the services provided to shareholders can be found on pages 171 to 172 and on the Company's website.
- An indication of the Company's overseas branches are on pages 168 to 170.

There have been no events affecting the Company since the financial year end to report to shareholders in accordance with the Accounts Regulations and Disclosure Guidance and Transparency Rules.

For the purposes of Listing Rule (LR) 9.8.4R, the information required to be disclosed by LR 9.8.4R can be found in the table below.

All the information cross referenced above is incorporated by reference into the Directors' Report.

References in this document to other documents on the Company's website, such as the Sustainability Report, are included as an aid to their location and are not incorporated by reference into any section of the Annual Report and Accounts.

Independent auditors

Our auditors, KPMG, have indicated their willingness to continue in office and, on the recommendation of the Audit Committee, a resolution regarding their reappointment and remuneration will be submitted to the AGM on 20 May 2022.

Audit information

The Directors confirm that, so far as they are aware, there is no relevant audit information of which the Company's auditors are unaware, and that they have each taken all the steps they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

Articles of Association

Unless expressly specified to the contrary in the Articles, the Company's Articles may be amended by a special resolution of the Company's shareholders.

A copy of the Articles is available at www.croda.com

Listing Rule (LR) 9.8.4R information

Section	Topic	Page reference
(1)	Capitalised interest	Page 111
(2)	Publication of unaudited financial information	Not applicable
(3)	Smaller related party transactions	Not applicable
(4)	Details of long term incentive schemes established specifically to recruit or retain a Director	Not applicable
(5) (6)	Waiver of emoluments by a Director	Page 101
(7) (8)	Allotments of equity securities for cash	Not applicable
(9)	Participation in a placing of equity securities	Not applicable
(10)	Contracts of significance	Page 111
(11) (14)	Controlling shareholder disclosures	Not applicable
(12) (13)	Dividend waiver	Page 109

Significant contracts and change of control

The Group has borrowing facilities which may require the immediate repayment of all outstanding loans together with accrued interest in the event of a change of control. The rules of the Company's employee share plans set out the consequences of a change in control of the Company on participants' rights under the plans. Generally, such rights will vest and become exercisable on a change of control subject to the satisfaction of performance conditions. None of the Executive Directors' service contracts contains provisions that are affected by a change of control and there are no other agreements that the Company is party to that take effect, alter or terminate in the event of a change of control of the Company, which are considered to be significant in terms of their potential impact on the Group. The Company does not have any contractual or other arrangements that are essential to the business of the Group.

Political donations

No donations were made for political purposes during the year (2020: £nil).

Financial risk management

The Group's exposure to and management of capital, liquidity, credit, interest rate and foreign currency risks are contained in note 20 on pages 153 to 154.

Capitalised interest

The Group's policy for capitalising borrowing costs directly attributable to the purchase or construction of fixed assets is set out on page 130.

Statement of Directors' responsibilities in respect of the Annual Report and the financial statements

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

Company law requires the Directors to prepare Group and parent Company financial statements for each financial year. Under that law they are required to prepare the Group financial statements in accordance with international accounting standards in conformity with the requirements of the UK-adopted international accounting standards and applicable law and have elected to prepare the parent Company financial statements in accordance with UK accounting standards and applicable law, including FRS 101 Reduced Disclosure Framework.

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

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant, reliable and prudent;
- for the Group financial statements, state whether they have been prepared in accordance with international accounting standards in conformity UK-adopted international accounting standards;
- for the parent Company financial statements, state whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the parent Company financial statements;
- assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

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

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

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

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

We confirm that to the best of our knowledge:

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

We consider the Annual Report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

The Directors' Report and the Strategic Report, including the sections of the Annual Report and Accounts incorporated by reference, is the 'management report' for the purposes of the Financial Conduct Authority Disclosure Guidance and Transparency Rules (DTR 4.1.8R). It was approved by the Board on 28 February 2022 and is signed on its behalf by

Tom Brophy
Group General Counsel and Company Secretary

28 February 2022

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

1. Our opinion is unmodified

We have audited the financial statements of Croda International Plc ("the Company") for the year ended 31 December 2021 which comprise the Group Income Statement, the Group Statement of Comprehensive Income, the Group and Company Balance Sheets, the Group Statement of Cash Flows, the Group and Company Statements of Changes in Equity, and the related notes, including the accounting policies on pages 125 to 131 and on page 164.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the parent Company's affairs as at 31 December 2021 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK-adopted international accounting standards;
- the parent Company financial statements have been properly prepared in accordance with UK accounting standards, including FRS 101 *Reduced Disclosure Framework;* and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

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

We were first appointed as auditor by the shareholders on 25 April 2018. The period of total uninterrupted engagement is for the four financial years ended 31 December 2021. We have fulfilled our ethical responsibilities under, and we remain independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

Overview

Materiality: Group financial statements as a whole	£16m (2020: £15m) 4.9% (2020: 5.0%) of normalised Group profit before tax
Coverage	85% (2020: 84%) of the total of the profits and losses that made up Group profit before tax

Key audit matters		vs 2020
Recurring risks	Valuation of defined benefit pension scheme obligation	◀▶
	Goodwill impairment	◀▶
	Recoverability of parent Company's investment in subsidiaries and intercompany debtors	◀▶

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

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

Group	The risk	Our response
Valuation of defined benefit pension scheme obligation (Gross defined benefit obligation £1,309.0m; 2020: £1,544.4m), although this specific risk is only associated with the UK scheme (£1,162.6m) and US scheme (£126.8m). In prior year the risk related to the UK scheme (£1,178.5m), US scheme (£133.9m) and Netherlands scheme (£212.3m). During the year the material scheme held in the Netherlands has been converted into a collective defined contribution scheme, and therefore the related defined benefit obligation has crystallised and been derecognised from the balance sheet. Accordingly, the year-end risk relates only to the ongoing UK and US schemes. *Refer to page 82 (Audit Committee Report), page 128 (accounting policy) and note 11 on pages 139 to 143 (financial disclosures).*	**Subjective valuation:** • The Group has two defined benefit pension schemes that are material in the context of the overall balance sheet and the results of the Group. • Significant estimates, including the discount rate, the inflation rate and the mortality rate, are made in valuing the Group's defined benefit pension obligations (before deducting the schemes' assets). The UK scheme is also still open to future accrual and new members, and small changes in the assumptions and estimates with respect to the obligation would have a significant effect on the financial position of the Group. The Group engages external actuarial specialists to assist them in selecting appropriate assumptions and calculate the obligations. • The effect of these matters is that, as part of our risk assessment, we determined that the valuation of the defined benefit obligations has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole, and possibly many times that amount. The financial statements (note 11) disclose the sensitivity estimated by the Group.	**Our procedures included:** • **Benchmarking assumptions:** we challenged key assumptions applied (discount rate, inflation rate, and mortality rate) with the support of our own actuarial specialists, including a comparison of key assumptions against market data. • **Actuary's credentials:** we assessed the competence, capabilities and objectivity of the Group's actuarial expert. • **Sensitivity analysis:** we assessed the sensitivity of the defined benefit obligation to changes in certain assumptions. • **Assessing transparency:** we considered adequacy of the Group's disclosures in respect of the sensitivity of the gross obligation to changes in key assumptions. We performed the tests above rather than seeking to rely on any of the Group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described. **Our results** • We found the valuation of the defined benefit pension scheme obligation to be acceptable (2020 result: acceptable).

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

Group	The risk	Our response
Goodwill impairment Goodwill: £852.0m (2020: £866.7m), although this specific risk is only associated with the Iberchem Fragrances (£242.2m) and Iberchem Flavours (£123.6m) Cash Generating Units. In the prior year, risk related to Sipo and Biosector Cash Generating Units. However, these CGUs are no longer considered as part of the key audit matter in the year as the estimated recoverable amount prepared by the Directors for these CGUs indicate significantly improved headroom. *Refer to page 82 (Audit Committee Report), page 127 (accounting policy) and note 12 on pages 143 to 145 (financial disclosures).*	**Forecast based assessment:** • The Group has, over recent years, acquired a number of companies which has led to a material increase in the goodwill balance. Some of these acquisitions, and in particular Iberchem, are still at an early stage of their integration into the Group and are therefore subject to greater levels of estimation uncertainty in respect of the underlying impairment model assumptions. • The headroom in respect of the impairment test on the Iberchem Fragrances and Iberchem Flavours Cash Generating Units is relatively small, and small changes in the assumptions applied in the value in use calculations could impact management's conclusions about the carrying value of goodwill and how this compares to the recoverable amount. • The effect of this matter is that, as part of our risk assessment, we determined that impairment assessments in respect of the Iberchem Fragrances and Iberchem Flavours Cash Generating Units have a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole. The financial statements (note 12) disclose the sensitivities estimated by the Group.	**Our procedures included:** • **Assessing methodology:** we obtained the discounted value in use cash flow models and assessed the methodology, principles and integrity of each model. • **Sector experience:** we involved our own valuation specialists to assist us in challenging the appropriateness of the discount rate assumption. • **Benchmark assumptions:** we challenged the Group's forecast assumptions for cash flow projections, including the rate of sales growth and operating profit growth in the short to medium term, the long-term growth rates and the appropriateness of discount rates, with reference to internally and externally derived sources. • **Historical comparisons:** we assessed the Group's historical forecasting accuracy by comparing forecasts from prior years with actual results in those years. • **Sensitivity analysis:** we performed breakeven analysis on the key assumptions including the discount rate and growth rates. • **Assessing transparency:** we considered the adequacy of the Group's disclosures in respect of impairment testing and whether disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions properly reflect the risks inherent in the valuations of goodwill. We performed the tests above rather than seeking to rely on any of the Group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described. **Our results** • We found the Group's conclusion that there is no impairment of goodwill in the Iberchem Fragrances and Iberchem Flavours Cash Generating Units to be acceptable (2020 result Sipo and Biosector Cash Generating Units: acceptable).

Parent Company	The risk	Our response
Recoverability of parent Company's investments in subsidiaries and intercompany debtors Investments in subsidiaries £1,385.6m and intercompany debtors £1,325.2m (2020: £1,452.2m) The parent company funds subsidiaries through a combination of equity and intercompany loans and following additions associated with the acquisition of Iberchem the investments in subsidiaries balance is now also considered as part of the key audit matter in the year. *Refer to page 82 (Audit Committee Report), page 130 and 164 (accounting policy) and notes F and G on pages 165 and 166 (financial disclosures).*	**Low risk, high value:** • The carrying amount of the parent Company's intercompany debtors, held at cost less impairment, represents 48% (2020: 51%) and the carrying value of investments in subsidiaries represents 50% of the parent Company's total assets. We do not consider the recoverable amount of these amounts to be at a high risk of significant misstatement, or to be subject to a significant level of judgement. However, due to their materiality in the context of the parent Company financial statements as a whole, this is considered to be the area which had the greatest effect on our overall parent Company audit.	**Our procedures included:** • **Tests of detail:** we assessed 100% of intercompany debtors to identify, with reference to the relevant debtors' draft balance sheet, whether they have a positive net asset value and therefore coverage of the debt owed, as well as assessing whether those debtor companies have historically been profit-making. • **Test of detail:** we compared the carrying amount of 100% of investments with the relevant subsidiaries' draft balance sheet to identify whether their net assets, being an approximation of their minimum recoverable amount, were in excess of their carrying amount and assessing whether those subsidiaries have historically been profit-making. • **Assessing subsidiary audits:** we assessed the work performed by the subsidiary audit team, and considering the results of that work, on those net assets, including assessing the ability of the subsidiary to obtain liquid funds and therefore the ability of the subsidiary to fund the repayment of the receivable. We performed the tests above rather than seeking to rely on any of the parent Company's controls because the nature of the balance meant that detailed testing is inherently the most effective means of obtaining audit evidence. **Our results** We found the Group's assessment of the recoverability of investment in subsidiaries and the intercompany debtors balance to be acceptable (2020 result: acceptable).

The identification and valuation of intangible assets acquired in respect of the Avanti and Iberchem business combinations was a key audit matter in the prior year. We continue to perform procedures over identification and valuation of intangible assets acquired in business combinations, however, the degree of subjectivity in assessing the assumptions applied by the Group has reduced given the smaller size of the two business combinations in 2021, and as such we have not assessed this as one of the most significant risks in our current year audit and, therefore, it is not separately identified in our report this year.

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

Materiality for the Group financial statements as a whole was set at £16.0m (2020: £15.0m), determined with reference to a benchmark of normalised Group profit before tax (PBT) of £328.6m (2020: £300.2m), of which it represents 4.9% (2020: 5.0%).

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

Materiality for the parent Company financial statements as a whole was set at £8.7m (2020: £8.7m), which is the component materiality for the parent company determined by the Group audit engagement team. This is lower than the materiality we would otherwise have determined with reference to a benchmark of parent Company total assets of £2,778.0m (2020: £2,851.4m), of which it represents 0.3% (2020: 0.3%).

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

Performance materiality was set at 75% (2020: 75%) of materiality for the financial statements as a whole, which equates to £12.0m (2020: £11.3m) for the Group and £6.5m (2020: £6.5m) for the Parent company. We applied this percentage in our determination of performance materiality because we did not identify any factors indicating an elevated level of risk.

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £0.8m (2020: £0.75m), in addition to other identified misstatements that warranted reporting on quantitative grounds.

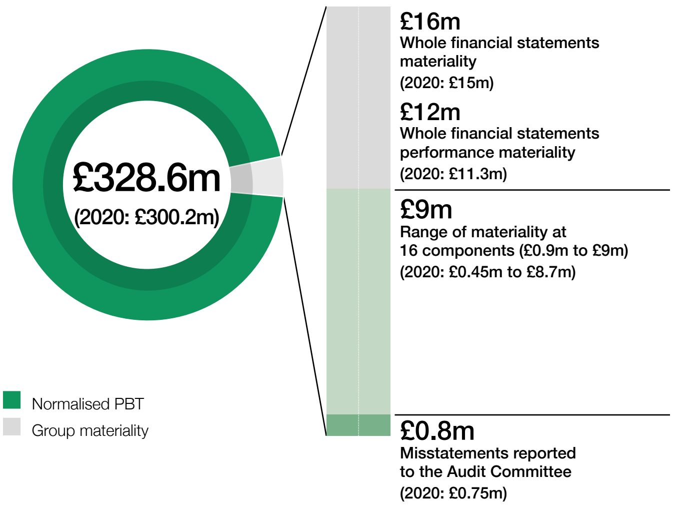
Of the Group's 87 (2020: 85) reporting components, we subjected 10 (2020: 12) to full scope audits for Group purposes and 6 (2020: 7) to specified risk-focused audit procedures. One component (2020: 1) for which we performed specific risk-focused procedures was not individually financially significant enough to require a full scope audit for Group purposes but did present specific individual risks that needed to be addressed. The other 5 (2020: 6) components for which we performed work other than full scope audits for Group reporting purposes were not individually significant but were included in the scope of our Group reporting work in order to provide further coverage over the Group's results.

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

The remaining 22% (2020: 22%) of total Group revenue, 15% (2020: 16%) of total of the profits and losses that made up the Group profit before tax and 12% (2020: 10%) of total Group assets is represented by 71 (2020: 66) reporting components, none of which individually represented more than 2% (2020: 2%) of any of total Group revenue, Group profit before tax or total Group assets. For these components, we performed analysis at an aggregated Group level to re-examine our assessment that there were no significant risks of material misstatement within these.

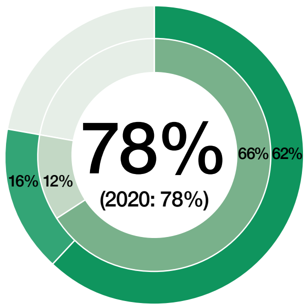
Normalised Group profit before tax

Group materiality
£16m (2020: £15m)

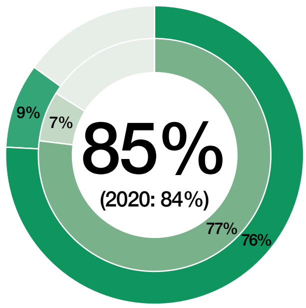


Normalised PBT
Group materiality

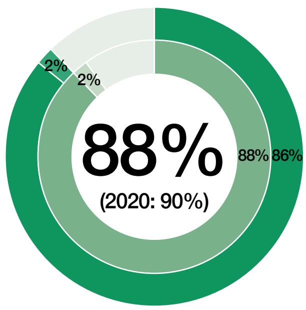
Group revenue



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



Group total assets



Full scope for Group audit purposes 2021
Specific risk-focused audit procedures 2021
Full scope for Group audit purposes 2020
Specific risk-focused audit procedures 2020
Residual components

The 2020 charts have been updated to include components scoped for specified risk-focused audit procedures

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

The Group team adopted a centralised approach to testing revenue, purchases and journal entries. Data and analytics routines were performed for 13 components, and the Group team assessed the outputs of these routines before sending outputs to component auditors and instructing them to test transactions meeting certain criteria. The instructions to component auditors also included significant areas to be covered, including the relevant risks detailed above and the information to be reported back. The Group team approved the component materialities, which ranged from £0.9m to £9.0m (2020: £0.5m to £8.7m), having regard to the mix of size and risk profile of the Group across the components. The work on 12 of the 16 components (2020: 11 of the 19 components) was performed by component auditors and the rest, including the audit of the parent Company, was performed by the Group team. The Group team performed procedures on the items excluded from normalised Group profit before tax.

The scope of the audit work performed was predominately substantive as we placed limited reliance upon the Group's internal control over financial reporting.

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

4. The impact of climate change on our audit

In planning our audit, we have considered the potential impact of climate change on the Group's business and its financial statements.

The Group has set out its Climate Positive targets and Science Based targets in line with limiting global warming to 1.5ºC by 2030, and to be climate net zero by 2050. The majority of the Group's carbon emissions are in the supply chain, and the Group continues to develop its assessment of climate change. Climate change initiatives impact the Group in a variety of ways including opportunities and risks relating to bio-based raw material supply, operational and supply chain decarbonisation and emerging regulatory requirements such as carbon taxes. Further information is provided on pages 40 to 43.

While the Group has set out its Climate Positive targets and Science Based targets, the Group continues to assess and develop the consequences of this in terms of capital expenditure, the cost base and impacts on cash flows.

The Group considered the impact of climate change and the Group's targets in the preparation of the financial statements, including an evaluation of critical accounting estimates and judgements. The Group concluded that this did not have a material effect on the consolidated financial statements, as described on page 125 and 126.

As part of our audit, we have made enquiries of management to understand the extent of the potential impact of climate change risks on the Group's financial statements, including their assessment of critical accounting estimates and judgements, and the effect on our audit. We have performed a risk assessment to evaluate the potential impact, including the goodwill impairment assessment, the estimates made regarding useful economic lives of property, plant and equipment, and the valuation of certain unquoted pension assets.

We held discussions with our own climate change professionals to challenge our risk assessment.

Taking into account the extent of headroom on goodwill, the nature of the Iberchem business, the expected remaining useful lives of property, plant and equipment, and the nature of unquoted pension assets, we assessed that there is not a significant impact on our audit for this financial year. There was no significant impact of climate on our key audit matters.

We have read the Group's disclosure of climate related information in the front half of the annual report as set out on pages 40 to 43 and considered consistency with the financial statements and our audit knowledge.

5. Going concern

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

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

- The potential impact on Group revenue of economic uncertainty and reduced customer confidence with a reduction in the outlook for global demand coupled with slower economic recovery; and
- The impact of a product quality issue leading to a product recall or loss of revenue for a period of time.

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

We considered whether these risks could plausibly affect the liquidity or covenant compliance in the going concern period by assessing the degree of downside assumption that, individually and collectively, could result in a liquidity issue, taking into account the Group's current and projected cash and facilities (a reverse stress test). We also assessed the completeness of the going concern disclosure on page 125. Our conclusions based on this work:

- we consider that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate;
- we have not identified, and concur with the Directors' assessment that there is not, a material uncertainty related to events or conditions that, individually or collectively, may cast significant doubt on the Group's or Company's ability to continue as a going concern for the going concern period;
- we have nothing material to add or draw attention to in relation to the Directors' statement on page 125 on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and parent Company's use of that basis for the going concern period, and we found the going concern disclosure on page 125 to be acceptable; and
- the same statement is materially consistent with the financial statements and our audit knowledge.

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

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

Identifying and responding to risks of material misstatement due to fraud

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

- Enquiring of Directors, the Audit Committee, internal audit and inspection of policy documentation as to the Group's high-level policies and procedures to prevent and detect fraud, including the internal audit function, as well as whether they have knowledge of any actual, suspected or alleged fraud.
- Reading Board and Audit Committee minutes.
- Considering remuneration incentive schemes (performance related annual Bonus Plan and Performance Share Plan) and performance targets for management, including the EPS growth target.

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

As required by auditing standards, we perform procedures to address the risk of management override of controls, in particular the risk that management may be in a position to make inappropriate accounting entries.

On this audit, we do not believe there is a fraud risk related to revenue recognition because revenue transactions have low individual value with high volume, are routine and process driven and do not involve judgement or estimation. This reduces the opportunities for fraudulent activity.

We did not identify any additional fraud risks.

We performed procedures including:

- Identifying journal entries to test for all full scope and specified risk focused components based on risk criteria by the Group audit team. Component audit teams were instructed to test the identified entries to supporting documentation. These included those posted by senior finance management or other high-risk users and those posted to unusual account combinations.
- Assessing whether the judgements made in making accounting estimates are indicative of a potential bias.

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

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general commercial and sector experience, through discussion with the Directors and other management (as required by auditing standards), and from inspection of the Group's regulatory and legal correspondence and discussed with the Directors and other management the policies and procedures regarding compliance with laws and regulations.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. This included communication from the Group audit team to all full scope and specified risk-focused component audit teams of relevant laws and regulations identified at the Group level, and a request for these component auditors to report to the Group team any instances of non-compliance with laws and regulations that could give rise to a material misstatement at the Group level.

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

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

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

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

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

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

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

7. We have nothing to report on the other information in the Annual Report

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

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

Strategic Report and Directors' Report

Based solely on our work on the other information:

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

Directors' Remuneration Report

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

Disclosures of emerging and principal risks and longer-term viability

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

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

- the Directors' confirmation within the long-term viability statement on pages 56 and 57 that they have carried out a robust assessment of the emerging and principal risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity;
- the Principal Risks disclosures describing these risks and how emerging risks are identified, and explaining how they are being managed and mitigated; and

the Directors' explanation in the long-term viability statement of how they have assessed the prospects of the Group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We are also required to review the long-term viability statement, set out on pages 56 and 57 under the Listing Rules. Based on the above procedures, we have concluded that the above disclosures are materially consistent with the financial statements and our audit knowledge.

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

Corporate governance disclosures

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

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

- the Directors' statement that they consider that the Annual Report and financial statements taken as a whole is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy;
- the section of the annual report describing the work of the Audit Committee, including the significant issues that the Audit Committee considered in relation to the financial statements, and how these issues were addressed; and
- the section of the annual report that describes the review of the effectiveness of the Group's risk management and internal control systems.

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

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

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

- adequate accounting records have not been kept by the parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

9. Respective responsibilities

Directors' responsibilities

As explained more fully in their statement set out on page 111, the Directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

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

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

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

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Ian Griffiths (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square
London
E14 5GL
28 February 2022

Group Consolidated Statements

Group Income Statement

for the year ended 31 December 2021

	Note	2021 Adjusted £m	2021 Adjustments £m	2021 Reported Total £m	2020 Adjusted £m	2020 Adjustments £m	2020 Reported Total £m
Revenue	1	**1,889.6**	**–**	**1,889.6**	1,390.3	–	1,390.3
Cost of sales		**(950.7)**	**–**	**(950.7)**	(758.2)	–	(758.2)
Gross profit		**938.9**	**–**	**938.9**	632.1	–	632.1
Operating costs	2	**(470.3)**	**(30.4)**	**(500.7)**	(312.5)	(29.6)	(342.1)
Operating profit	3	**468.6**	**(30.4)**	**438.2**	319.6	(29.6)	290.0
Financial costs	4	**(24.9)**	**(3.3)**	**(28.2)**	(19.5)	(1.5)	(21.0)
Financial income	4	**1.5**	**–**	**1.5**	0.5	–	0.5
Profit before tax		**445.2**	**(33.7)**	**411.5**	300.6	(31.1)	269.5
Tax	5	**(94.4)**	**5.7**	**(88.7)**	(72.4)	4.5	(67.9)
Profit after tax for the year		**350.8**	**(28.0)**	**322.8**	228.2	(26.6)	201.6
Attributable to:							
Non-controlling interests		**2.0**	**–**	**2.0**	–	–	–
Owners of the parent		**348.8**	**(28.0)**	**320.8**	228.2	(26.6)	201.6
		350.8	**(28.0)**	**322.8**	228.2	(26.6)	201.6

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

Earnings per 10.61p ordinary share		**Pence**		**Pence**	Pence		Pence
Basic	7	**250.0**		**230.0**	175.5		155.1
Diluted	7	**249.5**		**229.5**	175.3		154.8

Group Statement of Comprehensive Income

for the year ended 31 December 2021

	Note	2021 £m	2020 £m
Profit after tax for the year		**322.8**	201.6
Other comprehensive income/(expense):			
Items that will not be reclassified subsequently to profit or loss:			
Remeasurements of post-retirement benefit obligations	11	**40.6**	51.3
Tax on items that will not be reclassified	5	**(8.3)**	(9.7)
		32.3	41.6
Items that may be reclassified subsequently to profit or loss:			
Currency translation		**(61.1)**	(15.0)
Cash flow hedging	20	**3.7**	–
Cost of hedging reserve	20	**(6.0)**	–
Tax on items that may be reclassified	5	**0.4**	–
		(63.0)	(15.0)
Other comprehensive (expense)/income for the year		**(30.7)**	26.6
Total comprehensive income for the year		**292.1**	228.2
Attributable to:			
Non-controlling interests		**2.1**	0.1
Owners of the parent		**290.0**	228.1
		292.1	228.2
Arising from:			
Continuing operations		**292.1**	228.2
		292.1	228.2

Group Balance Sheet

at 31 December 2021

	Note	2021 £m	2020 £m
Assets			
Non-current assets			
Intangible assets	12	**1,271.6**	1,311.7
Property, plant and equipment	13	**988.1**	900.8
Right of use assets	14	**87.9**	80.1
Investments	16	**3.3**	5.2
Deferred tax assets	6	**13.5**	14.5
Retirement benefit assets	11	**35.3**	17.6
		2,399.7	2,329.9
Current assets			
Inventories	17	**443.0**	302.6
Trade and other receivables	18	**337.9**	289.9
Cash and cash equivalents	20	**112.8**	106.5
		893.7	699.0
Liabilities			
Current liabilities			
Trade and other payables	19	**(358.0)**	(240.5)
Borrowings and other financial liabilities	20	**(50.9)**	(49.1)
Lease liabilities	14	**(12.2)**	(10.7)
Provisions	21	**(5.5)**	(6.7)
Current tax liabilities		**(33.3)**	(38.4)
		(459.9)	(345.4)
Net current assets		**433.8**	353.6
Non-current liabilities			
Borrowings and other financial liabilities	20	**(794.6)**	(776.2)
Lease liabilities	14	**(78.3)**	(71.0)
Other payables	19	**(12.3)**	(27.1)
Retirement benefit liabilities	11	**(27.4)**	(49.9)
Provisions	21	**(3.6)**	(3.9)
Deferred tax liabilities	6	**(151.4)**	(160.3)
		(1,067.6)	(1,088.4)
Net assets		**1,765.9**	1,595.1
Equity			
Ordinary share capital	22	**15.1**	15.1
Preference share capital	24	**1.1**	1.1
Share capital		**16.2**	16.2
Share premium account		**707.7**	707.7
Reserves		**1,029.2**	861.9
Equity attributable to owners of the parent		**1,753.1**	1,585.8
Non-controlling interests in equity	26	**12.8**	9.3
Total equity		**1,765.9**	1,595.1

The financial statements on pages 120 to 161 were signed on behalf of the Board who approved the accounts on 28 February 2022.

Anita Frew
Chair

Jez Maiden
Group Finance Director

Group Statement of Cash Flows

for the year ended 31 December 2021

	Note	**2021 £m**	2020 £m
Cash generated from operating activities			
Cash generated by operations	ii	**479.0**	375.2
Interest paid		**(19.8)**	(17.5)
Tax paid		**(111.5)**	(70.7)
Net cash generated from operating activities		**347.7**	287.0
Cash flows from investing activities			
Acquisition of subsidiaries, net of cash acquired	28	**(58.1)**	(868.2)
Acquisition of associates and other investments	16	**–**	(1.5)
Purchase of property, plant and equipment	13	**(153.0)**	(115.0)
Purchase of other intangible assets	12	**(5.7)**	(6.2)
Proceeds from sale of property, plant and equipment		**0.2**	0.2
Cash paid against non-operating provisions	21	**(1.1)**	(1.7)
Interest received		**1.5**	0.5
Net cash used in investing activities		**(216.2)**	(991.9)
Cash flows from financing activities			
New borrowings		**320.2**	438.7
Repayment of borrowings		**(282.6)**	(201.4)
Payment of lease liabilities	14	**(14.4)**	(7.6)
Issue of ordinary shares		**–**	615.5
Acquisition of non-controlling interests		**(0.7)**	–
Net transactions in own shares		**(2.4)**	(6.9)
Dividends paid to equity shareholders	8	**(132.5)**	(115.9)
Dividends paid to non-controlling interests		**(0.2)**	–
Net cash used in financing activities		**(112.6)**	722.4
Net movement in cash and cash equivalents	i,iii	**18.9**	17.5
Cash and cash equivalents brought forward		**77.8**	63.1
Exchange differences	iii	**(2.4)**	(2.8)
Cash and cash equivalents carried forward		**94.3**	77.8
Cash and cash equivalents carried forward comprise:			
Cash at bank and in hand		**112.8**	106.5
Bank overdrafts		**(18.5)**	(28.7)
		94.3	77.8

Group Cash Flow Notes

for the year ended 31 December 2021

(i) Reconciliation to net debt

	Note	**2021 £m**	2020 £m
Net movement in cash and cash equivalents	iii	**18.9**	17.5
Net movement in borrowings and other financial liabilities	iii	**(23.2)**	(229.7)
Change in net debt from cash flows		**(4.3)**	(212.2)
Loans in acquired businesses		**(5.7)**	–
Non-cash movement in lease liabilities		**(24.1)**	(47.8)
Exchange differences		**11.4**	7.2
		(22.7)	(252.8)
Net debt brought forward		**(800.5)**	(547.7)
Net debt carried forward	iii	**(823.2)**	(800.5)

(ii) Cash generated by operations

	Note	**2021 £m**	2020 £m
Adjusted operating profit		**468.6**	319.6
Exceptional items	iv	**3.9**	(16.0)
Amortisation of intangible assets arising on acquisition		**(34.3)**	(13.6)
Operating profit		**438.2**	290.0
Adjustments for:			
Depreciation and amortisation		**113.3**	81.8
Fair value movement on contingent consideration		**(6.2)**	–
Impairments		**1.1**	1.4
Loss on disposal and write-offs of intangible assets and property, plant and equipment		**5.8**	–
Net provisions charged	21	**1.6**	4.2
Share-based payments		**29.1**	4.1
Non-cash pension expense		**–**	7.7
Share of loss of associate		**0.7**	1.1
Cash paid against operating provisions	21	**(2.1)**	(7.8)
Movement in inventories		**(140.9)**	(7.0)
Movement in receivables		**(53.2)**	(15.6)
Movement in payables		**91.6**	15.3
Cash generated by operations		**479.0**	375.2

(iii) Analysis of net debt

	2021 £m	Cash flow £m	Exchange movements £m	Other non-cash £m	2020 £m
Cash and cash equivalents	**112.8**	8.7	(2.4)	–	106.5
Bank overdrafts	**(18.5)**	10.2	–	–	(28.7)
Movement in cash and cash equivalents		18.9	(2.4)	–	
Borrowings repayable within one year	**(32.4)**	3.1	(0.5)	(14.6)	(20.4)
Borrowings repayable after more than one year	**(794.6)**	(40.7)	13.4	8.9	(776.2)
Lease liabilities	**(90.5)**	14.4	0.9	(24.1)	(81.7)
Movement in borrowings and other financial liabilities		(23.2)	13.8	(29.8)	
Total net debt	**(823.2)**	(4.3)	11.4	(29.8)	(800.5)

Included within other non-cash movements are £17.7m of lease liabilities recognised in the year.

(iv) Cash flow on exceptional items

The total cash outflow during the year in respect of exceptional items, including those recognised in prior years' income statements, was £16.0m (2020: £16.7m). Details of exceptional items can be found in note 3 on page 133.

Group Statement of Changes in Equity

for the year ended 31 December 2021

	Note	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Non-controlling interests £m	Total equity £m
At 1 January 2020		15.1	93.3	34.4	718.8	7.0	868.6
Profit after tax for the year		–	–	–	201.6	–	201.6
Other comprehensive (expense)/income		–	–	(15.1)	41.6	0.1	26.6
Total comprehensive (expense)/income for the year		–	–	(15.1)	243.2	0.1	228.2
Transactions with owners:							
Dividends on equity shares	8	–	–	–	(115.9)	–	(115.9)
Share-based payments		–	–	–	3.4	–	3.4
Issue of ordinary shares		1.1	614.4	–	–	–	615.5
Transactions in own shares		–	–	–	(6.9)	–	(6.9)
Total transactions with owners		1.1	614.4	–	(119.4)	–	496.1
Changes in ownership interests:							
Acquisition of a subsidiary with a non-controlling interest		–	–	–	–	2.2	2.2
Total changes in ownership interests		–	–	–	–	2.2	2.2
Total equity at 31 December 2020		**16.2**	**707.7**	**19.3**	**842.6**	**9.3**	**1,595.1**
At 1 January 2021		16.2	707.7	19.3	842.6	9.3	1,595.1
Profit after tax for the year		–	–	–	320.8	2.0	322.8
Other comprehensive (expense)/income		–	–	(63.1)	32.3	0.1	(30.7)
Total comprehensive (expense)/income for the year		–	–	(63.1)	353.1	2.1	292.1
Transactions with owners:							
Dividends on equity shares	8	–	–	–	(132.5)	–	(132.5)
Share-based payments		–	–	–	12.7	–	12.7
Transactions in own shares		–	–	–	(2.4)	–	(2.4)
Total transactions with owners		–	–	–	(122.2)	–	(122.2)
Changes in ownership interests:							
Acquisition of a subsidiary with a non-controlling interest		–	–	–	–	1.6	1.6
Acquisition of a non-controlling interest		–	–	–	(0.5)	(0.2)	(0.7)
Issue of share capital		–	–	–	–	0.2	0.2
Dividends paid to non-controlling interests		–	–	–	–	(0.2)	(0.2)
Total changes in ownership interests		–	–	–	(0.5)	1.4	0.9
Total equity at 31 December 2021		**16.2**	**707.7**	**(43.8)**	**1,073.0**	**12.8**	**1,765.9**

Other reserves include the Capital Redemption Reserve of £0.9m (2020: £0.9m), the Hedging Reserve of £3.0m (2020: £Nil), the Cost of Hedging Reserve of £(4.9)m (2020: £Nil) and the Translation Reserve of £(42.8)m (2020: £18.4m).

Group Accounting Policies

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

Basis of preparation

The consolidated financial statements have been prepared under the historical cost convention, in accordance with applicable law and UK-adopted international accounting standards. A summary of the more important Group accounting policies is set out below.

Going concern

The ongoing impact of COVID-19 and the broader consequences on the markets in which the Group operates have been considered in the preparation of the financial statements including our evaluation of critical accounting estimates and judgements which are detailed below. The financial statements on pages 120 to 161 have been prepared on a going concern basis which the Directors believe to be appropriate for the following reasons:

In 2021, the Group successfully extended the existing 2019 Club facility by a further year, resetting its five-year term and resulting in a maturity date of October 2026. At 31 December 2021 the Group had £1,226m of committed debt facilities available from its banking group, USPP bondholders and lease providers, with principal maturities between 2023 and 2030, of which £334.4m (2020: £378.3m) was undrawn, together with cash balances of £112.8m (2020: £106.5m).

The Directors have reviewed the liquidity and covenant forecasts for the Group's going concern assessment period covering at least 12 months from the date of approval of the financial statements. The Directors have also considered sensitivities in respect of potential downside scenarios, and the mitigating actions available, in concluding that the Group is able to continue in operation for a period of at least 12 months from the date of approving the financial statements. These sensitivities include a severe but plausible downside scenario, alongside an additional scenario considered to be severe but remote. Relative to a base case scenario, the sensitivities assume increasingly pessimistic outlooks for global demand, coupled with slower economic recoveries. In the severe downside scenario, demand falls below average 2021 levels throughout 2022 and 2023. Furthermore, both downside scenarios also assume a material increase in working capital, due to inventory build and higher customer receivables, and substantial margin erosion, predicated on a further deterioration in the economic conditions.

Based on 2021 results, reverse stress testing assesses that adjusted operating profit would need to fall by 69% to trigger an event of default, before consideration of available actions to conserve cash. The Directors do not consider this a plausible scenario. In considering the suitability of these scenarios, the Directors have considered, among other factors, the impact of the risk scenario combinations that form part of the viability statement.

In the downside scenarios, the Group continues to have significant liquidity headroom and good financial covenant headroom under its debt facilities. Excluded from the above scenario testing, the Directors have also considered the impact on the Group from the agreement to sell the majority of the Performance Technologies and Industrial Chemicals businesses for total consideration of €915m. The disposal will have a significant positive impact on Croda's leverage and liquidity in the short to medium term. The Directors are therefore satisfied that the Group has sufficient resources to continue in operation for a period of not less than 12 months from the date of approval of the financial statements. Accordingly, the consolidated financial statements have been prepared on a going concern basis.

Climate change

The Group has long recognised the scale of the climate emergency and considers this to offer both opportunities and risks in the future. The Group's current climate change strategy focuses on reducing its carbon footprint and increasing its use of bio-based raw materials, whilst the benefits in using its ingredients will enable more carbon to be saved than were emitted through operations and supply chain.

The impact of climate change has been considered in the preparation of these financial statements across a number of areas, including our evaluation of critical accounting estimates and judgements which are detailed below, consistent with the risks and opportunities set out on page 43. None of these risks had a material effect on the consolidated financial statements of the Group. The Group will continue developing its assessment of the impact that climate change has on the assets and liabilities recognised and presented in its financial statements.

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:

(i) Business disposal – the Group has signed an agreement to sell the majority of its Performance Technologies and Industrial Chemicals businesses. Whilst completion of the sale is considered highly probable, the Group's assessment that the disposal group is not available for sale in its present condition is a key judgement in determining that the disposal group is not classified as an asset held for sale at 31 December 2021. The divested business, comprising five manufacturing facilities, together with associated laboratory facilities and sales operations, currently forms part of Croda's integrated operating model and work is ongoing to separate the disposal group, with completion of the transaction expected in summer 2022.

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

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

(ii) Goodwill impairment – management are required to undertake an annual test for impairment of indefinite lived assets such as goodwill. Accordingly, the Group tests annually whether goodwill has suffered any impairment and the Group's goodwill value has been supported by the fair value less cost to sell or detailed value in use calculations relating to the recoverable amounts of the underlying Cash Generating Units ('CGUs'). 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) – estimated at 3% unless the profile of a particular CGU warrants a different treatment.
   - Selection of appropriate market participant discount rates to reflect the risks specific to the CGU.
   - Specific cash flow projections including key assumptions on revenue growth and operating margins – generally over a five-year period unless the profile of a particular CGU warrants a longer period.

   Recoverable amounts currently exceed carrying values including goodwill; however, testing did identify that reasonable possible changes in key assumptions would cause the recoverable amount of the Iberchem CGUs to be less than the carrying value. The assumptions selected and associated sensitivity analysis are disclosed in note 12. Due to the nature of the Iberchem business, including its low carbon footprint, the key assumptions were not materially impacted by the climate change risks and opportunities set out in the annual report on page 43.

Changes in accounting policy

(i) A number of new amendments to standards and interpretations are effective for annual periods beginning on or after 1 January 2021 and have been applied in preparing these consolidated financial statements. None of these had a significant effect on the consolidated financial statements of the Group.

(ii) New standards and interpretations not yet adopted – a number of new standards and amendments to standards and interpretations are effective for annual periods beginning on or after 1 January 2022 and have not been applied in preparing these consolidated financial statements. The Group is assessing the impact of these new standards and the Group's financial reporting will be presented in accordance with these standards from 1 January 2022 or 1 January 2023 as applicable.

Group accounts

General information

Croda International Plc is a public limited company, which is listed on the London Stock Exchange and incorporated and domiciled in the United Kingdom. It is registered in England and Wales and the address of its registered office can be found on page 172.

Subsidiaries

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

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

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

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

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

Transactions with non-controlling interests

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

Intangible assets

Goodwill

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

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

Other intangible assets arising on acquisition

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

Once recognised, such intangible assets will be initially valued using an appropriate methodology. For acquisitions in 2021 the following intangible asset types recognised and valuation methodologies applied were:

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

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

Research and development

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

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

Computer software

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

Revenue recognition

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

Sale of goods

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

Interest and dividend income

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

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

Group Accounting Policies (continued)

Segmental reporting

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

Employee benefits

Pension obligations

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

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

Other post-retirement benefits

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

Termination benefits

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

Share-based payments

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

Currency translations

Functional and presentation currency

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

Transactions and balances

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

Group companies

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

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

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

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

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

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

Taxation

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

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

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

Income statement presentation

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

Exceptional items

Exceptional items are those items that in the Directors' view are required to be separately disclosed by virtue of their size or incidence to enable a full understanding of the Group's financial performance. In the current year exceptional items relate to discount unwind and fair value adjustment in respect of contingent consideration, a pension curtailment gain (arising from transfer of the Dutch scheme to a collective defined contribution arrangement) and acquisition costs and fees incurred in preparation of the disposal of part of the PTIC business. Exceptional items in the prior year related to the delivery of cost saving actions announced in the 2019 full year results, discount unwind in contingent consideration and acquisition costs. Details can be found in note 3 on page 133.

Property, plant and equipment

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

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

Impairment of non-financial assets

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

Leases

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

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

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

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

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

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

Derivative financial instruments

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

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

(i) Fair value hedge

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

(ii) Cash flow hedge

The Group designates the spot element of forward foreign exchange contracts to hedge its currency risk and applies a hedge ratio of 1:1. The forward elements of the forward exchange contracts are excluded from the designation of the hedging instrument and are separately accounted for as a cost of hedging, which is recognised in equity in a cost of hedging reserve. The Group's policy is for the critical terms of the forward exchange contracts to align with the hedged item.

The Group determines the existence of an economic relationship between the hedging instrument and the hedged item based on the current, amount and timing of the respective cash flows. The Group assesses whether the derivative designated in each hedging relationship is expected to be and has been effective in offsetting changes in the cash flows of the hedged item using the hypothetical derivative method. In these hedge relationships, the main sources of ineffectiveness are changes in the time or amount of the hedged transactions.

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

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

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

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

Borrowings

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

Borrowing costs

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

Trade and other payables

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

Inventories

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

Trade and other receivables

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

Cash and cash equivalents

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

Environmental, restructuring and other provisions

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

Share capital

Investment in own shares

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

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

Dividends

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

Investments

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

1. Segmental analysis

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

There is no material trade between segments. Segmental results include items directly attributable to a specific segment as well as those that can be allocated on a reasonable basis.

	2021 £m	Restated 2020 £m
Income statement		
Revenue		
Consumer Care	**763.0**	527.8
Life Sciences	**572.3**	392.5
Performance Technologies	**439.5**	373.6
Industrial Chemicals	**114.8**	96.4
Total Group revenue	**1,889.6**	1,390.3
Adjusted operating profit		
Consumer Care	**188.5**	146.5
Life Sciences	**208.5**	124.5
Performance Technologies	**64.5**	48.9
Industrial Chemicals	**7.1**	(0.3)
Total Group operating profit (before exceptional items and amortisation of intangible assets arising on acquisition)	**468.6**	319.6
Exceptional items and amortisation of intangible assets arising on acquisition[1]	**(30.4)**	(29.6)
Total Group operating profit	**438.2**	290.0

1 Relates to Consumer Care £20.5m (2020: £13.5m), Life Sciences £7.5m (2020: £12.2m), Performance Technologies £1.8m (2020: £3.6m) and Industrial Chemicals £0.6m (2020: £0.3m)

As announced in the 2020 Annual Report the Group has revised the composition of its operating segments. Accordingly, the Group has restated the previously reported segment information for the year ended 31 December 2020 and aligned this with the information that is regularly presented to the Group's Executive Committee.

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

	Europe, Middle East & Africa £m	North America £m	Latin America £m	Asia £m	**Total £m**
Revenue 2021					
Consumer Care	300.3	210.9	68.6	183.2	**763.0**
Life Sciences	266.3	167.2	60.9	77.9	**572.3**
Performance Technologies	209.8	102.1	22.4	105.2	**439.5**
Industrial Chemicals	48.9	13.0	2.4	50.5	**114.8**
Total Group revenue	825.3	493.2	154.3	416.8	**1,889.6**
Revenue 2020 (restated)					
Consumer Care	178.1	172.0	55.0	122.7	**527.8**
Life Sciences	164.7	113.2	54.5	60.1	**392.5**
Performance Technologies	177.0	90.1	20.1	86.4	**373.6**
Industrial Chemicals	42.6	11.7	2.0	40.1	**96.4**
Total Group revenue	562.4	387.0	131.6	309.3	**1,390.3**

	2021 £m	Restated 2020 £m
Depreciation and amortisation (before amortisation of intangible assets arising on acquisition)		
Consumer Care	**31.7**	24.7
Life Sciences	**22.1**	19.9
Performance Technologies	**19.4**	18.8
Industrial Chemicals	**5.8**	4.8
Total Group	**79.0**	68.2

The Group manages its business segments on a global basis. The operations are based in the following geographical areas: Europe, with manufacturing sites in the UK, France, the Netherlands, Italy, Spain, Finland and Denmark; North America, with manufacturing sites in the US; Latin America, with manufacturing sites in Brazil, Argentina, Colombia and Mexico; Asia, with manufacturing sites in Singapore, Japan, India, China, Indonesia, Malaysia and Australia; and South Africa and Tunisia.

The Group's revenue from external customers in the UK is £52.3m (2020: £46.2m), in Germany is £196.0m (2020: £104.7m), in China is £161.4m (2020: £105.2m), in the US is £455.3m (2020: £355.4m) and the total revenue from external customers from other countries is £1,024.6m (2020: £778.8m). No single external customer represents more than 4% of the total revenue of the Group. The total of non-current assets other than financial instruments, retirement benefit assets and deferred tax assets located in the UK is £208.2m (2020: £178.9m) and in other countries is £1,290.7m (2020: £1,252.2m). Goodwill has not been split by geography as this asset is not attributable to a geographical area.

2. Operating costs

	2021 £m	2020 £m
Analysis of net operating expenses by function:		
Distribution costs	**93.0**	71.7
Administrative expenses	**407.7**	270.4
	500.7	342.1

Additional information on the nature of operating expenses, including depreciation and employee costs, is provided in note 3.

3. Profit for the year

	2021 £m	2020 £m
The Group profit for the year is stated after charging:		
Depreciation and amortisation (notes 12, 13 & 14)	**113.3**	81.8
Impairments (exceptional)	**–**	1.4
Impairments (non-exceptional)	**1.1**	–
Staff costs (note 9)	**411.9**	295.5
Redundancy costs (non-exceptional)	**0.8**	0.2
Redundancy costs (exceptional)	**–**	1.8
Inventories – cost recognised as expense in cost of sales	**950.7**	758.2
Inventories – provision movement in the year	**6.7**	3.8
Research and development	**58.7**	38.2
Net foreign exchange	**0.8**	2.1
Bad debt charge (note 18)	**0.4**	0.5

	2021 £m	2020 £m
Adjustments:		
Exceptional items – operating profit		
Business acquisitions and disposal costs	**(13.5)**	(11.7)
Redundancy, restructuring and impairments	**–**	(4.3)
Pension curtailment gain	**11.2**	–
Fair value movement on contingent consideration	**6.2**	–
Exceptional items – financial costs		
Unwind of discount on contingent consideration	**(3.3)**	(1.5)
Exceptional items	**0.6**	(17.5)
Amortisation of intangible assets arising on acquisition	**(34.3)**	(13.6)
Total adjustments	**(33.7)**	(31.1)

The exceptional items in the current year reflects discount unwind and fair value adjustment both in respect of contingent consideration, a pension curtailment gain (arising from transfer of the Dutch scheme to a collective defined contribution arrangement) and acquisition costs and fees incurred in preparation of the disposal of part of the PTIC business. Movements in contingent consideration have been presented as exceptional as they are not directly representative of the underlying business performance in the period, and therefore this presentation provides a meaningful basis to make comparisons between reporting periods. The pension curtailment gain and business acquisition and disposal costs have been presented as exceptional due to their size and one-off nature. The exceptional items in the prior year related to the delivery of cost saving actions announced in the 2019 full year results, discount unwind in contingent consideration and acquisition costs.

3. Profit for the year continued

	2021 £m	2020 £m
Services provided by the Group's auditors		
Audit services		
Fees payable to the Group auditors for the audit of Parent Company and consolidated financial statements	**0.2**	0.1
Fees payable to the Group auditors and its associates for the audit of the Company's subsidiaries	**1.4**	1.4
Other audit services		
Other audit-related assurance services including fees payable in relation to the Group's interim review	**0.1**	0.1
	1.7	1.6

4. Net financial costs

	2021 £m	2020 £m
Financial costs		
US$100m 5.94% fixed rate 10 year note	**–**	0.4
US$100m 3.75% fixed rate 10 year note	**2.7**	2.7
2019 Club facility due 2026	**7.0**	4.5
US$200m 3 year term loan due 2023	**0.3**	0.2
€30m 1.08% fixed rate 7 year note	**0.3**	0.3
€70m 1.43% fixed rate 10 year note	**0.9**	0.9
£30m 2.54% fixed rate 7 year note	**0.8**	0.8
£70m 2.80% fixed rate 10 year note	**2.0**	2.0
€50m 1.18% fixed rate 8 year note	**0.5**	0.5
£65m 2.46% fixed rate 8 year note	**1.6**	1.6
US$60m 3.70% fixed rate 10 year note	**1.6**	1.7
Net interest on retirement benefit liabilities	**0.3**	1.2
Provision against non-operating loan	**2.5**	–
Interest on lease liabilities	**2.2**	1.5
Other bank loans and overdrafts	**2.2**	1.2
Unwind of discount on contingent consideration	**3.3**	1.5
	28.2	21.0
Financial income		
Bank interest receivable and similar income	**(1.5)**	(0.5)
Net financial costs	**26.7**	20.5

5. Tax

	2021 £m	2020 £m
(a) Analysis of tax charge for the year		
UK current corporate tax	**11.5**	13.2
Overseas current corporate taxes	**95.0**	52.1
Current tax	**106.5**	65.3
Deferred tax (note 6)	**(17.8)**	2.6
	88.7	67.9
(b) Tax on items charged/(credited) to other comprehensive income or equity		
Deferred tax on remeasurement of post-retirement benefits (OCI)	**8.3**	9.7
Deferred tax on share-based payments (equity)	**(2.4)**	(0.9)
Deferred tax on provisions (OCI)	**(0.2)**	0.3
	5.7	9.1
(c) Factors affecting the tax charge for the year		
Profit before tax	**411.5**	269.5
Tax at the standard rate of corporation tax in the UK, 19.0% (2020: 19.0%)	**78.2**	51.2
Effect of:		
Tax rate changes	**7.1**	(1.5)
Prior year over-provisions	**(16.3)**	(3.2)
Tax cost of remitting overseas income to the UK	**2.2**	1.5
Expenses and write-offs not deductible for tax purposes	**7.3**	1.8
Utilisation of unrecognised tax losses	**–**	(1.4)
Net effect of higher overseas tax rates	**10.2**	19.5
	88.7	67.9

The adjusted effective corporate tax rate before exceptional items of 21.2% (2020: 24.1%) is higher than the UK's standard tax rate of 19.0%. The reported effective corporate tax rate after exceptional items is 21.6% (2020: 25.2%). This year's tax charge benefitted from a one-off settlement of a previous uncertain tax position.

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

Legislation to increase the UK standard rate of corporation tax from 19% to 25% was substantively enacted on 24 May 2021, effective from 1 April 2023. The calculation of deferred tax balances in the UK have been revised accordingly. Overseas tax is calculated at the rates prevailing in the respective jurisdictions.

6. Deferred tax

	2021 £m	2020 £m
The deferred tax balances included in these accounts are attributable to the following:		
Deferred tax assets		
Retirement benefit liabilities	**6.1**	11.1
Provisions	**42.1**	25.5
Gross deferred tax asset	**48.2**	36.6
Offset with deferred tax liabilities	**(34.7)**	(22.1)
Net deferred tax asset	**13.5**	14.5
Deferred tax liabilities		
Accelerated capital allowances	**97.1**	93.1
Revaluation gains	**1.9**	1.9
Acquired intangibles	**77.9**	82.3
Retirement benefit assets	**8.2**	4.1
Other	**1.0**	1.0
Gross deferred tax liability	**186.1**	182.4
Offset with deferred tax assets	**(34.7)**	(22.1)
Net deferred tax liability	**151.4**	160.3
The movement on deferred tax balances during the year is summarised as follows:		
Deferred tax credited/(charged) through the income statement		
Continuing operations before adjustments	**13.9**	(3.6)
Adjustments and exceptional items	**3.9**	1.0
Deferred tax charged directly to other comprehensive income or equity (note 5(b))	**(5.7)**	(9.1)
Acquisitions	**(8.9)**	(64.8)
Exchange differences	**4.7**	1.3
	7.9	(75.2)
Net balance brought forward	**(145.8)**	(70.6)
Net balance carried forward	**(137.9)**	(145.8)
Deferred tax (charged)/credited through the income statement relates to the following:		
Retirement benefit obligations	**(0.7)**	1.5
Accelerated capital allowances	**(2.1)**	(10.3)
Provisions	**13.9**	4.1
Other	**6.7**	2.1
	17.8	(2.6)

Deferred tax is calculated in full on temporary differences under the balance sheet liability method at rates appropriate to each subsidiary. Deferred tax expected to reverse in the year to 31 December 2022 and beyond has been measured using the rate due to prevail in the year of reversal.

Deferred tax assets have been recognised in all material cases where such assets arise, as it is probable the assets will be recovered. At 31 December 2021, no deferred tax asset has been recognised in respect of £32.6m of losses across the Group as it is not considered probable that there will be future taxable profits against which these losses can be offset.

Deferred tax is only recognised on the unremitted earnings of overseas subsidiaries to the extent that remittance is expected in the foreseeable future. If all earnings were remitted, an additional £9.3m (2020: £6.6m) of tax would be payable.

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

Of the gross deferred tax assets, £10.4m are expected to reverse within 12 months of the balance sheet date. No material reversal of any of the deferred tax liability is expected within 12 months of the balance sheet date based on the Group's current capital expenditure programme.

7. Earnings per share

	2021 £m	2020 £m
Adjusted profit after tax for the year attributable to owners of the parent	**348.8**	228.2
Exceptional items and amortisation of intangible assets	**(33.7)**	(31.1)
Tax impact of exceptional items and amortisation of intangible assets	**5.7**	4.5
Profit after tax for the year attributable to owners of the parent	**320.8**	201.6

	Number m	Number m
Weighted average number of 10.61p (2020: 10.61p) ordinary shares in issue for basic calculation	**139.5**	130.0
Deemed issue of potentially dilutive shares	**0.3**	0.2
Average number of 10.61p (2020: 10.61p) ordinary shares for diluted calculation	**139.8**	130.2

	Pence	Pence
Basic earnings per share	**230.0**	155.1
Adjusted basic earnings per share	**250.0**	175.5
Diluted earnings per share	**229.5**	154.8
Adjusted diluted earnings per share	**249.5**	175.3

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

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

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

8. Dividends

	Pence per share	2021 £m	Pence per share	2020 £m
Ordinary				
Interim				
2020 interim, paid October 2020	**–**	**–**	39.5	50.8
2021 interim, paid October 2021	**43.5**	**60.6**	–	–
Final				
2019 final, paid May 2020	**–**	**–**	50.5	65.0
2020 final, paid June 2021	**51.5**	**71.8**	–	–
	95.0	**132.4**	90.0	115.8
Preference (paid June and December)		**0.1**		0.1
		132.5		115.9

The Directors are recommending a final dividend of 56.5p per share, amounting to a total of £78.8m, in respect of the financial year ended 31 December 2021.

Subject to shareholder approval, the dividend will be paid on 6 June 2022 to shareholders registered on 6 May 2022 and has not been accrued in these financial statements. The total dividend for the year ended 31 December 2021 will be 100.0p per share amounting to a total of £139.4m.

9. Employees

	2021 £m	2020 £m
Group employment costs including Directors		
Wages and salaries	**288.0**	215.7
Share-based payment charges (note 23)	**41.3**	13.6
Social security costs	**49.7**	36.6
Post-retirement benefit costs	**32.9**	29.6
Redundancy costs	**0.8**	2.0
	412.7	297.5

	2021 Number	2020 Number
Average employee numbers by function		
Production	**3,766**	3,044
Selling and distribution	**1,342**	1,189
Administration	**929**	689
	6,037	4,922

As required by the Companies Act 2006, the figures disclosed above are the weighted averages based on the number of employees including Executive Directors. At 31 December 2021, the Group had 6,135 (2020: 5,684) employees in total.

10. Directors' and key management compensation

Detailed information concerning Directors' remuneration, interests and options is shown in section D of the Directors' Remuneration Report, which is subject to audit, on pages 97 to 105 forming part of the Annual Report and Accounts.

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

	2021 £m	2020 £m
Key management compensation including Directors		
Short-term employee benefits	**8.1**	4.8
Post-retirement benefit costs	**0.1**	0.1
Share-based payment charge	**6.6**	1.2
	14.8	6.1

11. Post-retirement benefits

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

	2021 £m	2020 £m
Balance sheet:		
Retirement benefit assets	**35.3**	17.6
Retirement benefit liabilities	**(27.4)**	(49.9)
Net asset/(liability) in Group balance sheet	**7.9**	(32.3)
Net balance sheet assets/(liabilities) for:		
Defined pension benefits	**21.4**	(17.2)
Post-employment medical benefits	**(13.5)**	(15.1)
	7.9	(32.3)
Income statement charge included in profit before tax for:		
Defined pension benefits	**13.5**	23.9
Post-employment medical benefits	**0.7**	0.8
	14.2	24.7
Remeasurements included in other comprehensive income for:		
Defined pension benefits	**(38.5)**	(52.5)
Post-employment medical benefits	**(2.1)**	1.2
	(40.6)	(51.3)

Defined benefit pension schemes

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

The UK scheme operated on a final salary basis until 5 April 2016, following which the scheme changed to a Career Average Revalued Earnings (CARE) defined benefit scheme, with annual pensionable earnings capped and pensions in payment indexed based on CPI (previously RPI) for service accrued from 6 April 2016. This change is expected to reduce the future comparable cost and risk attached to the UK scheme. The US scheme operates a cash balance pension scheme that provides a guaranteed rate of return on pension contributions until retirement (other than for 'grandfathered' employees). From 1 October 2017 the US scheme was closed to new joiners, who will receive defined contribution benefits. The US plans also do not generally receive inflationary increases once in payment. With the exception of this difference in inflationary risk, the Group's main defined benefit pension schemes continue to face materially similar risks, as described on pages 142 and 143.

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

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

During the period the Group's primary Netherlands scheme was converted into a collective defined contribution scheme for both past and future service, as allowed under local regulations and as agreed with the representative trade unions. This change resulted in the settlement of the defined benefit scheme's assets and liabilities and a corresponding curtailment gain of £11.2m on cessation of defined benefit accrual, which has been recognised in the Group income statement. All parties had formally agreed to the settlement by 30 November 2021, therefore the settlement accounting is based on the valuation of the scheme assets and liabilities at this date. Under the new scheme, employer contributions have been fixed for the next two years initially, and the level thereafter will be subject to agreement with employees and the trade unions. The employer is not exposed to demographic and financial risks, as the benefits provided will be those that can be afforded by the scheme only, without recourse to the employer, therefore this scheme is accounted for as a defined contribution scheme.

11. Post-retirement benefits continued

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

	2021 £m	2020 £m
Present value of funded obligations		
UK pension scheme	**(1,162.6)**	(1,178.5)
US pension scheme	**(126.8)**	(133.9)
Netherlands pension scheme	**–**	(212.3)
Rest of world	**(19.6)**	(19.7)
	(1,309.0)	(1,544.4)
Fair value of schemes' assets		
UK pension scheme	**1,178.3**	1,163.7
US pension scheme	**145.4**	150.4
Netherlands pension scheme	**–**	205.7
Rest of world	**16.4**	17.0
	1,340.1	1,536.8
Net asset/(liability) in respect of funded schemes	**31.1**	(7.6)
Present value of unfunded obligations	**(9.7)**	(9.6)
Net asset/(liability) in Group balance sheet (excluding post-employment medical benefits)	**21.4**	(17.2)

	2021 £m	2020 £m
Movement in present value of retirement benefit obligations in the year:		
Opening balance	**1,554.0**	1,451.7
Current service cost	**24.7**	23.1
Past service cost – curtailments	**(11.2)**	–
Settlements	**(207.1)**	–
Acquisitions	**0.9**	–
Interest cost	**20.1**	27.3
Remeasurements		
Change in demographic assumptions	**8.2**	(56.4)
Change in financial assumptions	**(46.7)**	149.3
Experience losses/(gains)	**26.9**	(1.9)
Contributions paid in		
Employee	**3.0**	2.9
Benefits paid	**(46.8)**	(46.2)
Exchange differences on overseas schemes	**(7.3)**	4.2
	1,318.7	1,554.0
Movement in fair value of schemes' assets in the year:		
Opening balance	**1,536.8**	1,390.8
Interest income	**20.1**	26.5
Remeasurements		
Return on scheme assets, excluding amounts included in financial expenses	**26.9**	143.5
Contributions paid in		
Employee	**3.0**	2.9
Employer	**13.6**	15.4
Settlements	**(207.1)**	–
Benefits paid out	**(46.8)**	(46.2)
Exchange differences on overseas schemes	**(6.4)**	3.9
	1,340.1	1,536.8

As at the balance sheet date, the present value of retirement benefit obligations comprised approximately £351m in respect of active employees, £367m in respect of deferred members and £601m in relation to members in retirement.

Total employer contributions to the schemes in 2022 are expected to be £10.7m.

The actuarial assumptions were as follows:

	2021 UK	2021 US	2021 Netherlands*	2020 UK	2020 US	2020 Netherlands
Discount rate	**1.8%**	**2.8%**	**1.1%**	1.3%	2.4%	0.8%
Inflation rate – RPI	**3.2%**	**2.5%**	**2.0%**	2.8%	2.5%	1.8%
Inflation rate – CPI	**2.8%**	**n/a**	**n/a**	2.4%	n/a	n/a
Rate of increase in salaries	**4.8%**	**3.5%**	**2.4%**	4.4%	3.5%	2.4%
Rate of increase for pensions in payment	**3.1%**	**n/a**	**1.8%**	2.7%	n/a	1.3%
Duration of liabilities (i.e. life expectancy) (years)	**18.9**	**11.0**	**n/a**	19.6	11.2	22.3
Remaining working life	**9.6**	**10.6**	**n/a**	9.6	10.6	12.4

* Actuarial assumptions as at the settlement date

Mortality assumptions are based on country-specific mortality tables and where appropriate allow for future improvements in life expectancy. Where credible data exists, actual plan experience is taken into account. No adjustments have been made to mortality assumptions as at 31 December 2021 to reflect the potential effects of COVID-19 as the actual plan experience is not yet available and as it is too soon to make a judgement on the impact of the pandemic on future mortality improvements. The mortality experience analysis for the scheme will be carried out in the future as part of the 30 September 2023 funding valuation for the UK Croda Pension Scheme. Applying the mortality tables adopted, the expected future average lifetime of members currently at age 65 and members at age 65 in 20 years' time is as follows:

			Current age 65			Age 65 in 20 years
	UK	US	Netherlands	UK	US	Netherlands
Male	20.1	20.9	21.1	21.4	22.1	22.6
Female	23.3	22.8	25.0	24.7	23.9	26.4

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

	Impact on retirement benefit obligation		
	Sensitivity	Of increase	Of decrease
Discount rate	0.5%	-8.5%	9.7%
Inflation rate	0.5%	6.5%	-6.0%
Mortality (assumes a one-year change in life expectancy)	1 year	4.9%	-4.8%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting year) has been applied as when calculating the retirement benefit obligation recognised in the Group balance sheet. The weighted average duration of the defined benefit obligation is 18.1 years (2020: 19.2 years).

The assets in the schemes comprised:

	2021 £m	2021 %	2020 £m	2020 %
Quoted				
Equities	**188.2**	**14%**	277.9	18%
Government bonds	**590.8**	**44%**	674.0	44%
Corporate bonds	**70.6**	**5%**	124.2	8%
Other quoted securities	**28.7**	**2%**	31.3	2%
Unquoted				
Cash and cash equivalents	**73.1**	**5%**	77.5	5%
Real estate (pooled investment vehicles)	**61.6**	**5%**	56.7	4%
Derivatives	**10.0**	**1%**	6.4	0%
Other	**317.1**	**24%**	288.8	19%
	1,340.1	**100%**	1,536.8	100%

Derivatives presented above represent the scheme's net position on Government bond repurchase agreements and other swap contracts (valued on a mark-to-market basis) which form part of the scheme's liability driven investment (LDI) portfolio. The non-derivative assets in the LDI portfolio have been presented in the relevant asset category. Other investments include; a fund of hedge funds, which consists of a fund of multiple investment managers across both traditional markets such as equities and credit and also more specialist diversified strategies; infrastructure type investments that hold assets linked to the value and income from UK and overseas infrastructure.

11. Post-retirement benefits continued

Post-employment medical benefits

The Group operates an unfunded post-employment medical benefit scheme in the US. The method of accounting, significant assumptions and the frequency of valuations are similar to those used for defined benefit pension schemes set out above with the addition of actuarial assumptions relating to the long-term increase in health care costs of 5.0% a year (2020: 5.0%).

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

	2021 £m	2020 £m
Present value of unfunded obligations		
US scheme	**13.5**	15.1

	2021 £m	2020 £m
Movement in present value of retirement benefit obligations in the year:		
Opening balance	**15.1**	14.1
Current service cost	**0.4**	0.4
Interest cost	**0.3**	0.4
Remeasurements – change in demographic assumptions	**–**	(0.2)
Remeasurements – change in financial assumptions	**(1.2)**	1.7
Remeasurements – experience gains	**(0.9)**	(0.3)
Benefits paid	**(0.3)**	(0.4)
Exchange differences on overseas schemes	**0.1**	(0.6)
	13.5	15.1

Pension and medical benefits – risks and volatility

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

Asset volatility

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

Changes in bond yields

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

Inflation risk

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

Life expectancy

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

Investments are well diversified, such that the failure of any single investment would not have a material impact on the overall level of assets. A significant portion of assets in 2021 consists of equities and bonds, although the schemes also invest in property, cash and infrastructure funds. The Group believes that equities offer the best returns over the long term with an acceptable level of risk. The UK scheme makes use of a portfolio of derivative instruments to mitigate interest rate and inflation risk.

The latest triennial valuation of the UK scheme was completed as at 30 September 2020. As a result, no deficit funding payments to this scheme are required prior to completion of the next triennial valuation (as at 30 September 2023). The funding review of our US scheme is undertaken annually. As at 1 December 2020 the scheme was 142.8% funded.

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

	Less than a year £m	Between 1–2 years £m	Between 2–5 years £m	Beyond 5 years £m	Total £m
Pension benefits	40.4	40.7	133.5	1,104.1	1,318.7
Post-employment medical benefits	0.5	0.5	1.6	10.9	13.5
	40.9	41.2	135.1	1,115.0	1,332.2

Defined contribution schemes

	2021 £m	2020 £m
Contributions paid charged to operating profit	**7.8**	6.1

12. Intangible assets

	Goodwill £m	Software £m	Technology processes £m	Customer relationships £m	Trade names and brands £m	Other intangibles £m	Total £m
Cost							
At 1 January 2020	348.5	29.5	61.7	36.1	6.8	2.9	485.5
Exchange differences	3.1	(0.1)	1.8	(1.0)	(0.3)	(0.2)	3.3
Additions	–	5.3	–	–	0.1	0.9	6.3
Acquisitions	515.1	0.8	90.8	183.5	82.8	0.3	873.3
Reclassifications	–	0.2	–	–	–	–	0.2
At 31 December 2020	**866.7**	**35.7**	**154.3**	**218.6**	**89.4**	**3.9**	**1,368.6**
At 1 January 2021	866.7	35.7	154.3	218.6	89.4	3.9	1,368.6
Exchange differences	(34.7)	(0.7)	(7.6)	(10.2)	(4.5)	(0.1)	(57.8)
Additions	–	5.5	–	–	–	0.2	5.7
Acquisitions	20.0	0.2	6.0	18.0	4.2	–	48.4
Disposals and write-offs	–	(4.0)	–	–	–	–	(4.0)
Reclassifications	–	(0.3)	(0.1)	–	–	0.9	0.5
At 31 December 2021	**852.0**	**36.4**	**152.6**	**226.4**	**89.1**	**4.9**	**1,361.4**
Accumulated amortisation							
At 1 January 2020	–	17.5	13.6	6.4	1.3	1.4	40.2
Exchange differences	–	0.1	0.7	0.1	0.1	–	1.0
Charge for the year (note 3)	–	2.0	7.8	4.4	1.2	0.3	15.7
Reclassifications	–	–	0.1	–	–	(0.1)	–
At 31 December 2020	**–**	**19.6**	**22.2**	**10.9**	**2.6**	**1.6**	**56.9**
At 1 January 2021	–	19.6	22.2	10.9	2.6	1.6	56.9
Exchange differences	–	(0.8)	(1.6)	(0.7)	(0.1)	–	(3.2)
Charge for the year (note 3)	–	2.7	15.8	12.9	5.0	0.6	37.0
Disposals and write-offs	–	(0.9)	–	–	–	–	(0.9)
Reclassifications	–	(0.2)	–	–	–	0.2	–
At 31 December 2021	**–**	**20.4**	**36.4**	**23.1**	**7.5**	**2.4**	**89.8**
Net carrying amount							
At 31 December 2021	**852.0**	**16.0**	**116.2**	**203.3**	**81.6**	**2.5**	**1,271.6**
At 31 December 2020	866.7	16.1	132.1	207.7	86.8	2.3	1,311.7
At 1 January 2020	348.5	12.0	48.1	29.7	5.5	1.5	445.3

Intangible asset amortisation is recorded in operating costs within the income statement on page 120.

12. Intangible assets continued

Impairment testing for CGUs containing goodwill

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

As discussed in the accounting policies note on page 127, goodwill is tested at each year end for impairment with reference to the relevant CGU's recoverable amount compared to the unit's carrying value including goodwill. Assets are grouped at the lowest level for which there are separately identifiable cash flows relevant to the acquisition generating the goodwill. The recoverable amount is based on the higher of fair value less cost to sell and value in use calculations using discounted cash flow projections with the following key assumptions:

- Terminal value growth rates – set for each CGU with reference to the long-term growth rate for the market and territory in which the CGU operates
- Discount rate – set using a weighted average cost of capital adjusted for the specific risk profile of each CGU
- Cash flow projections – based on key assumptions including revenue growth, operating margins and forecast period.

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

			2021			2020
	Standalone CGUs £m	**Allocated goodwill £m**	**Total £m**	Standalone CGUs £m	Allocated goodwill £m	Total £m
Consumer Care	**385.4**	**210.6**	**596.0**	390.4	214.7	605.1
Life Sciences	**151.2**	**69.5**	**220.7**	156.6	69.8	226.4
Performance Technologies	**24.3**	**4.4**	**28.7**	24.3	4.5	28.8
Industrial Chemicals	**6.6**	**–**	**6.6**	6.4	–	6.4
	567.5	**284.5**	**852.0**	577.7	289.0	866.7

The allocated goodwill primarily relates to £59m (2020: £63m) associated with the 2020 acquisition of Iberchem as it relates to revenue synergies with Croda's existing Consumer Care business and £192m (2020: £192m) associated with the 2006 acquisition of Uniqema (with all other balances individually less than £10m). Due to the geographical and operational scale of the Uniqema acquisition, this goodwill balance is tested for impairment at an operating segment level. Standalone CGUs operate independently of the Group's core regional operating assets, are capable of generating largely independent cash inflows and are therefore annually tested separately for impairment.

For impairment testing performed at an operating segment level, cash flow projections are based on the Group's current year results and a growth rate of 3% (an appropriate view based on past experience reflecting the market and territories in which the Group operates), discounted using a weighted average cost of capital, which for these purposes has been calculated to be approximately 8.5% pre-tax (2020: 8.3%). No reasonably possible changes in key assumptions would cause the recoverable amount of the operating segments to be less than their carrying value. Based on the testing performed, no impairment has been recognised for the year ended 31 December 2021.

Standalone CGUs

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

	2021 £m	2020 £m
Incotec	**67.6**	72.1
Biosector	**24.6**	26.2
Sipo	**22.1**	21.3
Ionphase	**6.5**	7.0
Rewitec	**2.3**	2.4
Avanti	**59.0**	58.3
Iberchem – Fragrances	**242.2**	258.5
Iberchem – Flavours	**123.6**	131.9
Alban Muller	**6.3**	–
Parfex	**13.3**	–
	567.5	577.7

For impairment testing performed at a Standalone CGU level, the recoverable amount for Sipo, Ionphase and Rewitec CGUs was based on fair value less cost to sell as they form part of the Performance Technologies and Industrial Chemicals business disposal. For other Standalone CGUs the recoverable amount was based on value in use calculations. Incotec and Avanti cash flow projections have been based on specific estimates for five years, with Biosector and Iberchem CGUs using 10-year projections to better reflect the industry and territory in which they operate and the period through to when they are expected to reach a steady state of operation. Unless otherwise stated, these cash flow projections assume an appropriate view of past experience, specifically that the market share will not change significantly and that gross and operating margins will remain broadly constant. The terminal value growth rates and discount rates applied in these CGU level calculations are set out below:

	Terminal value growth rate		Pre-tax discount rate	
	2021	2020	**2021**	2020
Incotec	**3.0%**	3.0%	**8.9%**	8.5%
Biosector	**3.0%**	3.0%	**11.9%**	11.0%
Avanti	**3.0%**	n/a	**11.0%**	n/a
Iberchem – Fragrances	**3.0%**	n/a	**10.5%**	n/a
Iberchem – Flavours	**3.0%**	n/a	**10.4%**	n/a

Based on the annual impairment testing performed, no impairment has been recognised for the year ended 31 December 2021, and all Standalone CGUs remain on track to perform to our long-term expectations. In forming this conclusion, the Directors have reviewed sensitivity analysis which considered all reasonably possible downsides on key assumptions, both individually and in combination, and considered whether these would give rise to an impairment. This analysis concluded that no reasonably possible changes in key assumptions would cause the recoverable amount of the Standalone CGUs to be less than the carrying value, other than for the Iberchem CGUs.

For the Iberchem CGUs, the assumptions underpinning the cash flow projections used in the value in use calculation reflect delivery of the acquisition business plan, which the business remains on track to achieve in the medium to long term. These projections use an appropriate view of past experience, specifically that operating margins will improve and sales growth targets will be achieved resulting in approximately 10% compound average growth rates ('CAGR') at a sales level and operating profit level over the period. The estimated recoverable amount of the CGUs exceeded their carrying value by approximately £27m (Fragrances: £17m, Flavours: £10m) and therefore the Directors concluded that no impairment was required; however, the calculations are sensitive to changes in key assumptions. The key assumptions considered by the Directors, where a reasonably possible change could give rise to an impairment, were the projection period operating profit CAGR, terminal value growth rate and discount rate. If the Fragrances/Flavours operating profit CAGR assumptions were reduced by 0.4%/0.6% or the pre-tax discount rates increased by 0.2%/0.3%, then the CGUs' recoverable amount would be reduced to a level comparable with the carrying value. A 1% decrease in the terminal value growth rate, which, although not management's current expectation, is considered to be reasonably possible, would lead to an impairment charge of £45m (Fragrances: £32m, Flavours: £13m).

Goodwill arising in the year was assessed for impairment with reference to the consideration paid and no impairment has been recognised. This goodwill will be subject to the same annual review process commencing the year after initial recognition. Parfex goodwill will be tested alongside the Iberchem – Fragrances CGU in line with the level at which goodwill is monitored.

13. Property, plant and equipment

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2020	198.6	1,107.8	1,306.4
Exchange differences	(0.6)	(11.5)	(12.1)
Additions	20.2	94.8	115.0
Acquisitions	32.5	18.4	50.9
Other disposals and write-offs	(0.1)	(3.3)	(3.4)
Reclassifications to intangible assets	6.3	(6.5)	(0.2)
At 31 December 2020	**256.9**	**1,199.7**	**1,456.6**
At 1 January 2021	256.9	1,199.7	1,456.6
Exchange differences	(6.9)	(24.6)	(31.5)
Additions	40.2	112.8	153.0
Acquisitions	9.9	3.1	13.0
Other disposals and write-offs	(0.6)	(8.8)	(9.4)
Reclassifications to intangible assets	(2.6)	2.1	(0.5)
At 31 December 2021	**296.9**	**1,284.3**	**1,581.2**
Accumulated depreciation and impairment losses			
At 1 January 2020	76.0	425.2	501.2
Exchange differences	0.5	0.5	1.0
Charge for the year (note 3)	6.9	48.6	55.5
Other disposals and write-offs	(0.1)	(2.9)	(3.0)
Reclassifications	(0.1)	0.1	–
Impairments	0.7	0.4	1.1
At 31 December 2020	**83.9**	**471.9**	**555.8**
At 1 January 2021	83.9	471.9	555.8
Exchange differences	(3.1)	(16.0)	(19.1)
Charge for the year (note 3)	8.5	54.6	63.1
Other disposals and write-offs	(0.6)	(6.1)	(6.7)
Reclassifications	(0.9)	0.9	–
At 31 December 2021	**87.8**	**505.3**	**593.1**
Net book amount			
At 31 December 2021	**209.1**	**779.0**	**988.1**
At 31 December 2020	173.0	727.8	900.8
At 1 January 2020	122.6	682.6	805.2

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

	2021 £m	2020 £m
Assets under construction		
Land and buildings	**42.8**	16.9
Plant and equipment	**178.6**	153.7
	221.4	170.6

14. Leases

Right of use assets

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2020	48.4	9.3	57.7
Exchange differences	(2.0)	(0.3)	(2.3)
Additions	42.6	1.2	43.8
Remeasurements	0.2	0.2	0.4
Acquisitions	2.4	0.1	2.5
Other disposals and write-offs	(0.5)	(0.5)	(1.0)
At 31 December 2020	**91.1**	**10.0**	**101.1**
At 1 January 2021	91.1	10.0	101.1
Exchange differences	(0.9)	(0.4)	(1.3)
Additions	10.1	7.6	17.7
Remeasurements	3.4	0.1	3.5
Acquisitions	0.8	0.5	1.3
Other disposals and write-offs	(2.8)	(0.6)	(3.4)
At 31 December 2021	**101.7**	**17.2**	**118.9**
Accumulated depreciation and impairment losses			
At 1 January 2020	9.1	2.4	11.5
Exchange differences	(0.5)	(0.1)	(0.6)
Charge for the year (note 3)	9.0	1.6	10.6
Other disposals and write-offs	(0.4)	(0.4)	(0.8)
Impairments	0.3	–	0.3
At 31 December 2020	**17.5**	**3.5**	**21.0**
At 1 January 2021	17.5	3.5	21.0
Exchange differences	(0.2)	(0.2)	(0.4)
Charge for the year (note 3)	10.9	2.3	13.2
Other disposals and write-offs	(2.3)	(0.5)	(2.8)
At 31 December 2021	**25.9**	**5.1**	**31.0**
Net book amount			
At 31 December 2021	**75.8**	**12.1**	**87.9**
At 31 December 2020	73.6	6.5	80.1
At 1 January 2020	39.3	6.9	46.2

Lease liabilities

	2021 £m	2020 £m
Lease liabilities included in the Group balance sheet		
Current	**12.2**	10.7
Non-current	**78.3**	71.0
	90.5	81.7

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

In addition to the lease liabilities recognised at 31 December 2021 the Group has committed to new lease contracts, commencing in 2022, with a total discounted value of £0.8m.

14. Leases continued

Amounts recognised in the Group income statement

	2021 £m	2020 £m
Interest on lease liabilities	**2.2**	1.5
Expenses relating to short-term leases	**0.3**	0.5
Expenses relating to low value leases, excluding short-term leases of low value assets	**0.6**	0.1
Expenses relating to variable lease components	**0.5**	0.4
Depreciation of right of use assets	**13.2**	10.6
Impairment of right of use assets	**–**	0.3
Profit on disposal of right of use assets	**(0.1)**	(0.1)
	16.7	13.3

Total cash outflow for leases

	2021 £m	2020 £m
Payment of lease liabilities	**14.4**	7.6
Payment of short-term, low value and variable lease components	**1.4**	1.0
	15.8	8.6

15. Future commitments

	2021 £m	2020 £m
Group capital projects		
At 31 December the Directors had authorised the following expenditure on capital projects:		
Contracted, but not provided for		
Property, plant and equipment	**19.3**	41.1
Intangible assets	**0.8**	1.8
Authorised, but not contracted for		
Property, plant and equipment	**106.4**	72.3
Intangible assets	**3.7**	3.6
	130.2	118.8

16. Investments

The amounts recognised in the balance sheet are as follows:

	2021 £m	2020 £m
Associate	**–**	1.8
Other investments	**3.3**	3.4
	3.3	5.2

During the year, the Group impaired the carrying value of its minority shareholding in Cutitronics Limited resulting in a charge to the income statement of £1.1m. There have been no material changes in other investments during the year. All assets recognised as other investments on the Group balance sheet are non-quoted equity securities measured at fair value.

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

	2021 £m	2020 £m
Share of loss of associate	**0.7**	1.1
Impairment of associate	**1.1**	–
	1.8	1.1

17. Inventories

	2021 £m	2020 £m
Raw materials	**121.8**	63.9
Work in progress	**56.0**	39.8
Finished goods	**265.2**	198.9
	443.0	302.6

The Group consumed £950.7m (2020: £758.2m) of inventories during the year.

18. Trade and other receivables

	2021 £m	2020 £m
Amounts falling due within one year		
Trade receivables	**280.3**	241.0
Less: provision for impairment of receivables	**(2.9)**	(2.5)
Trade receivables – net	**277.4**	238.5
Other receivables	**45.9**	41.6
Prepayments	**14.6**	9.8
	337.9	289.9

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

	2021 £m	2020 £m
Not impaired		
Less than three months	**39.1**	29.5
Three to six months	**6.3**	5.2
Over six months	**1.1**	4.4
	46.5	39.1

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

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

	2021 £m	2020 £m
Sterling	**17.2**	11.9
US Dollar	**112.0**	75.5
Euro	**106.4**	105.4
Other	**102.3**	97.1
	337.9	289.9

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

	2021 £m	2020 £m
At 1 January	**2.5**	2.2
Charged to income statement	**0.4**	0.5
Net write-off of uncollectible receivables	**–**	(0.2)
At 31 December	**2.9**	2.5

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

Notes to the Group Accounts (continued)

19. Trade and other payables

	2021 £m	2020 £m
Trade payables	**133.2**	97.8
Taxation and social security	**15.7**	10.3
Other payables	**62.8**	37.6
Accruals and deferred income	**132.5**	83.8
Contingent consideration	**26.1**	38.1
	370.3	267.6

All trade payables are payable within one year. Included in the above are balances payable after one year of £8.5m (2020: £26.1m) contingent consideration and £3.8m (2020: £1.0m) other payables. During the period, contingent consideration has decreased by £6.2m due to fair value movements and £9.2m due to payments, increasing by £3.3m for the unwind of discounting and £0.1m for foreign exchange. Fair value movements in the year reflect the latest estimate of future revenue forecasts for applicable products. As at 31 December 2021, the undiscounted fair value of contingent consideration in respect of the Avanti acquisition was £26.9m, capped at a maximum remaining amount of £35.2m.

20. Borrowings, other financial liabilities and other financial assets

This note should be read in conjunction with the further liquidity disclosures in our accounting policies note and the Finance Review on pages 46 to 49.

	2021 £m	2020 £m
Assets		
Non-current assets – Investments	**3.3**	5.2
Current assets – Trade and other receivables (excluding prepayments)	**323.3**	280.1
	326.6	285.3
Current liabilities		
Trade and other payables (excluding taxation, social security, contingent consideration, accruals and deferred income)	**192.2**	134.4
US$200m 3 year term loan due 2023	**14.5**	7.0
Unsecured bank loans and overdrafts due within one year or on demand	**21.9**	30.8
Other loans	**14.5**	11.3
Lease liabilities	**12.2**	10.7
	255.3	194.2
Non-current liabilities		
2019 Club facility due 2026	**262.2**	218.1
US$200m 3 year term loan due 2023	**110.9**	138.5
US$100m 3.75% fixed rate 10 year note	**74.1**	73.2
€30m 1.08% fixed rate 7 year note	**25.2**	26.9
€70m 1.43% fixed rate 10 year note	**58.7**	62.7
£30m 2.54% fixed rate 7 year note	**30.0**	30.0
£70m 2.80% fixed rate 10 year note	**70.0**	70.0
€50m 1.18% fixed rate 8 year note	**41.9**	44.8
£65m 2.46% fixed rate 8 year note	**65.0**	65.0
US$60m 3.70% fixed rate 10 year note	**44.5**	43.9
Other secured bank loans	**9.8**	1.8
Other unsecured bank loans	**2.3**	1.3
Lease liabilities	**78.3**	71.0
	872.9	847.2

During October 2021, the Group extended the existing 2019 Club facility by a further year, resetting its five-year term and resulting in a maturity date of October 2026. Interest is charged on this agreement at a floating rate based on ICE GBP LIBOR, ICE LIBOR or EURIBOR, depending upon the drawdown currency, plus a variable margin. Due to the cessation of ICE GBP LIBOR at the end of 2021, the Group updated the existing 2019 Club facility to include SONIA (Risk Free Rate) for GBP based borrowings. Until 31 December 2021, GBP borrowings were drawn using ICE GBP LIBOR. In July 2020 the Group arranged a three-year amortising Term Loan for US$200m. Interest is charged on this agreement at a floating rate based on ICE LIBOR plus a variable margin. The margin the Group pays on this borrowing over and above standard rates is determined by the Group's net debt to EBITDA ratio.

	2021 £m	2020 £m
Maturity profile of financial liabilities		
Repayments fall due as follows:		
Within one year		
Bank loans and overdrafts	**36.4**	37.8
Other loans	**14.5**	11.3
	50.9	49.1
Lease liabilities	**12.2**	10.7
	63.1	59.8
After more than one year		
Loans repayable		
Within one to two years	**171.2**	30.8
Within two to five years	**397.9**	385.4
Five years and over	**225.5**	360.0
	794.6	776.2
Lease liabilities	**78.3**	71.0
	872.9	847.2
The minimum lease payments under lease liabilities fall due as follows:		
Within one year	**14.4**	12.7
Within one to two years	**13.0**	11.8
Within two to five years	**24.9**	19.2
Five years and over	**54.6**	55.0
	106.9	98.7
Future finance charges on lease liabilities	**(16.4)**	(17.0)
Present value of lease liabilities	**90.5**	81.7

	2021 £m	2020 £m
Undiscounted maturity analysis of financial liabilities		
Within one year		
Bank loans and overdrafts	**36.8**	38.3
Other loans	**15.1**	11.8
Lease liabilities	**14.4**	12.7
	66.3	62.8
After more than one year		
Loans repayable		
Within one to two years	**187.6**	45.3
Within two to five years	**437.0**	423.9
Five years and over	**245.5**	391.4
Lease liabilities		
Within one to two years	**13.0**	11.8
Within two to five years	**24.9**	19.2
Five years and over	**54.6**	55.0
	962.6	946.6

The analysis above includes estimated interest payable to maturity on the underlying loans. For the loans due after more than one year £14.9m (2020: £14.3m) of the interest falls due within one year of the balance sheet date, £13.4m (2020: £14.0m) within one to two years, £33.7m (2020: £34.0m) within two to five years and £13.5m (2020: £22.1m) beyond five years.

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

Interest rate and currency profile of Group financial liabilities

	Total £m	Fixed £m	Floating £m	Fixed rate weighted average Interest rate %	Fixed rate weighted average Fixed period Years
Sterling	336.4	165.0	171.4	2.62	4.3
US Dollar	299.0	118.6	180.4	3.73	7.9
Euro	241.4	125.8	115.6	1.28	4.2
Other	59.2	–	59.2	–	–
At 31 December 2021	**936.0**	**409.4**	**526.6**	**2.53**	**5.3**
Sterling	254.3	165.0	89.3	2.62	5.3
US Dollar	287.0	117.1	169.9	3.73	8.9
Euro	270.2	134.4	135.8	1.28	5.2
Other	95.5	–	95.5	–	–
At 31 December 2020	**907.0**	**416.5**	**490.5**	**2.50**	**6.3**

Fair values

Prior to 2016, the Group did not typically utilise complex financial instruments and accordingly the only element of Group borrowings where fair value differed from book value was the US$100m fixed rate 10-year note that was issued in 2010. In January 2020 the existing US$100m fixed rate 10-year note matured and was repaid, this was replaced with a new US$100m fixed rate 10-year note (27 January 2020). On 27 June 2016, the Group issued £100m and €100m of fixed rate notes. On 6 June 2019, the Group issued a further £65m, €50m and US$60m of fixed rate notes.

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

	Book value 2021 £m	**Fair value 2021 £m**	Book value 2020 £m	Fair value 2020 £m
Cash deposits	**112.8**	**112.8**	106.5	106.5
Other investments	**3.3**	**3.3**	5.2	5.2
2019 Club facility due 2026	**(262.2)**	**(262.2)**	(218.1)	(218.1)
US$200m 3 year term loan due 2023	**(125.4)**	**(125.4)**	(145.5)	(145.5)
US$100m 3.75% fixed rate 10 year note	**(74.1)**	**(78.2)**	(73.2)	(82.9)
€30m 1.08% fixed rate 7 year note	**(25.2)**	**(25.5)**	(26.9)	(27.5)
€70m 1.43% fixed rate 10 year note	**(58.7)**	**(61.5)**	(62.7)	(67.0)
£30m 2.54% fixed rate 7 year note	**(30.0)**	**(30.3)**	(30.0)	(30.9)
£70m 2.80% fixed rate 10 year note	**(70.0)**	**(71.9)**	(70.0)	(75.2)
€50m 1.18% fixed rate 8 year note	**(41.9)**	**(43.5)**	(44.8)	(47.5)
£65m 2.46% fixed rate 8 year note	**(65.0)**	**(65.7)**	(65.0)	(68.9)
US$60m 3.70% fixed rate 10 year note	**(44.5)**	**(47.4)**	(43.9)	(49.9)
Other bank borrowings	**(34.0)**	**(34.0)**	(33.9)	(33.9)
Other loans	**(14.5)**	**(14.5)**	(11.3)	(11.3)
Contingent consideration	**(26.1)**	**(26.1)**	(38.1)	(38.1)
Lease liabilities	**(90.5)**	**(90.5)**	(81.7)	(81.7)
Forward foreign currency contracts	**(2.3)**	**(2.3)**	–	–

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

Financial instruments

Financial instruments measured at fair value use the following hierarchy:

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

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

Borrowing facilities

As at 31 December 2021, the Group had undrawn committed facilities of £334.4m (2020: £378.3m). In addition, the Group had other undrawn facilities of £40.1m (2020: £50.1m) available. Of the Group's total committed facilities of £1,225.8m, £1,211.0m expire after 2022. New and repaid borrowings disclosed in the Group Statement of Cash Flows reflect routine short-term cash management, comprising regular monthly drawdowns and repayments on the Group's revolving credit facilities.

Financial risk factors

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

Currency risk

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

For 2021, had the Group’s basket of reporting currencies been 10% weaker/stronger than the actual rates experienced, post-tax profit for the year would have been £29.4m (2020: £18.9m) lower/higher than reported, primarily as a result of the translation of the profits of the Group’s overseas entities, and equity would have been £156.5m (2020: £141.5m) lower/higher.

Cash flow hedging

At 31 December 2021, the Group held two instruments to hedge exposures to changes in foreign currency on a highly probable future business disposal and debt repayment (hedged items), with a maturity profile of less than one year. The combined nominal value of the contracts was £601.9m and the average forward contract rates were 0.85 (EUR:GBP) and 1.12 (EUR:USD). These contracts are contingent on the successful completion of the business disposal and were designated as cash flow hedges. These hedging activities provide the Group with certainty over approximately 85% of its estimated FX exposure on these forecast future transactions.

The combined carrying amount of the contracts was a £2.3m liability at 31 December 2021, reported within trade and other payables. At 31 December 2021, the cash flow hedging reserve was £3.0m credit (2020: £nil), net of £0.7m tax, and the costs of hedging reserve was £4.9m debit (2020: £nil), net of £1.1m tax. There was no hedge ineffectiveness or reclassifications recognised in the income statement during the year ended 31 December 2021.

A 10% strengthening/weakening of GBP, Euro or USD at 31 December 2021 would have affected the measurement of the forward contracts and therefore equity by approximately £56m. This analysis assumes that all other variables remain constant and ignores any impact of forecast future transactions.

Interest rate risk

The Group has both interest bearing assets and liabilities. In 2016, the Group had a policy of maintaining no more than 60% of its gross borrowings at fixed interest rates in normal circumstances. During 2016, the Group increased its amount of fixed rate debt following payment of the £136m special dividend and consequent increase in core debt requirements. Notes were issued in the amounts of £100m and €100m with an average maturity of 3.6 years and interest rate of 2.08%. During 2017, the policy formally increased the upper limit for fixed rate debt to 75% of gross borrowings. During 2019, the Group increased its amount of fixed rate debt following payment of the £151.5m special dividend. Notes were issued in the amounts of £65m, €50m and US$60m with an average maturity of 6.1 years and interest rate of 2.47%. In January 2020 the Group repaid its US$100m 10-year loan note carrying a fixed rate of 5.94% and replaced it with a US$100m 10-year loan note carrying a fixed rate of 3.75%. At 31 December 2021, approximately 45% of Group borrowings were at fixed rates.

At 31 December 2021, aside from the loan notes referred to above, all Group debt and cash was exposed to repricing within 12 months of the balance sheet date.

At 31 December 2021, the Group’s fixed rate debt was at a weighted average rate of 2.53% (2020: 2.50%). The Group’s floating rate liabilities are predominantly based on LIBOR and its overseas equivalents.

Based on the above, had interest rates moved by 10 basis points in the territories where the Group has substantial borrowings, post-tax profits would have moved by £0.5m (2020: £0.4m) due to a change in interest expense on the Group’s floating rate borrowings.

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

Liquidity risk

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

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

Credit risk

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

Capital risk management

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

In order to maintain this optimal structure, the Group may adjust the amount of dividends paid, issue new shares, return capital to shareholders or dispose of assets to reduce net debt. Given the Group's strong balance sheet and sustained trading growth, the Group announced a dividend policy in 2011 of paying a dividend of between 40% and 50% of sustainable earnings. Further details can be found in the Finance Review on pages 46 to 49.

Underlying growth coupled to Return on Invested Capital (ROIC) is the key perceived driver of shareholder value within the Group. The Group's ROIC now stands at 14.2% against a post-tax Weighted Average Cost of Capital (WACC) of 6.4%, thus hitting the Group's target of maintaining ROIC at two to three times WACC. In addition, the Group employs two widely used ratios to measure its ability to service its debt. Both net debt/EBITDA and EBITDA interest cover were well ahead of target in 2021. Further details can be found in the Finance Review on pages 46 to 49. The Group was in compliance with its covenant requirements throughout the year. Additional information on progress against Key Performance Indicators can be found on pages 44 and 45.

21. Provisions

	Environmental £m	Restructuring £m	Other £m	Total £m
At 1 January 2021	6.3	2.7	1.6	10.6
Exchange differences	0.1	–	–	0.1
Released to the income statement	(0.4)	(0.8)	(0.8)	(2.0)
Charged to the income statement	0.8	–	2.8	3.6
Cash paid against provisions and utilised	(1.1)	(1.9)	(0.2)	(3.2)
At 31 December 2021	**5.7**	**–**	**3.4**	**9.1**

Analysis of total provisions

	2021 £m	2020 £m
Current	**5.5**	6.7
Non-current	**3.6**	3.9
	9.1	10.6

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

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

In relation to the environmental provision, the Directors expect that the balance will be utilised within 10 years. Provisions for remediation costs are made when there is a present obligation, it is probable that expenditures for remediation work will be required and the cost can be estimated within a reasonable range of possible outcomes. The costs are based on currently available facts and prior experience. Environmental liabilities are recorded at the estimated amount at which the liability could be settled at the balance sheet date. Remediation of environmental damage typically takes a long time to complete due to the substantial amount of planning and regulatory approvals normally required before remediation activities can begin. In addition, increases in or releases of environmental provisions may be necessary whenever new developments occur or additional information becomes available. Consequently, environmental provisions can change significantly and the timing and quantum of costs are inherently uncertain. The level of environmental provision is based on management's best estimate of the most likely outcome for each individual exposure.

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

22. Ordinary share capital

Ordinary shares of 10.61p (2020: 10.61p)	2021 £m	2020 £m
Allotted, called up and fully paid		
At 1 January – 142,536,884 (2020: 131,906,881) ordinary shares	**15.1**	14.0
Issued in the year	**–**	1.1
At 31 December – 142,536,884 (2020: 142,536,884) ordinary shares	**15.1**	15.1

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

During 2021, options were granted to employees under the Croda International Plc Sharesave Scheme to subscribe for 55,474 ordinary shares at an option price of 7327p per share and under the Croda International Plc International Sharesave Plan to subscribe for 202,071 ordinary shares at an option price of 7327p per share. Conditional awards over 130,131 ordinary shares were granted under the Performance Share Plan during the year and 52,370 under the Free Share Plan. Also granted in the year were 8,621 shares under the Restricted Share Plan.

During the year consideration of £2.6m was received on the exercise of options over 62,581 shares. The options were satisfied with shares transferred from the Group's employee share trusts. Since the year end a further 999 shares have been transferred from the trusts. During the year, the Group purchased 78,744 of its own ordinary shares to satisfy awards under various share-based payment schemes for consideration of £4.9m.

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

	Year option granted	Number of shares	Price	Options exercisable from
Croda International Plc Sharesave Scheme	2018	4,434	4144p	1 Nov 2021 to 30 Apr 2022
	2019	83,463	3898p	1 Nov 2022 to 30 Apr 2023
	2020	70,019	4804p	1 Nov 2023 to 30 Apr 2024
	2021	54,505	7327p	1 Nov 2024 to 30 Apr 2025
Croda International Plc International Sharesave Plan (2009)	2019	249,158	3898p	1 Nov 2022 to 30 Nov 2022
	2020	205,219	4804p	1 Nov 2023 to 30 Nov 2023
	2021	198,868	7327p	1 Nov 2024 to 30 Nov 2024
Croda International Plc Performance Share Plan (2014)	2019	135,111	Nil	12 Mar 2022
	2020	113,353	Nil	25 Mar 2023
	2020	48,447	Nil	29 Apr 2023
	2021	129,389	Nil	24 Mar 2024
Croda International Plc Deferred Bonus Share Plan	2019	8,913	Nil	12 Mar 2022
Croda International Plc Restricted Share Plan	2019	4,821	Nil	26 Mar 2022
	2019	582	Nil	9 Aug 2022
	2020	7,134	Nil	25 Mar 2023
	2021	8,421	Nil	17 Mar 2024
Croda International Plc Free Share Plan	2021	51,580	Nil	25 Apr 2022

23. Share-based payments

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

	2021 £m	2020 £m
Analysis of amounts recognised in the income statement:		
Charged in respect of equity settled share-based payment transactions	**10.3**	2.5
Charged in respect of cash settled share-based payment transactions	**31.0**	11.1
	41.3	13.6
Analysis of amounts recognised in the balance sheet:		
Liability in respect of cash settled share-based payment transactions	**28.0**	9.2

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

23. Share-based payments continued

Croda International Plc Sharesave Scheme ('Sharesave')

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

	2021	2020
Grant date	**16 Sep 2021**	10 Sep 2020
Share price at grant date	**9144p**	6078p
Exercise price	**7327p**	4804p
Number of employees	**727**	692
Shares under option	**55,474**	74,578
Vesting period	**Three years**	Three years
Expected volatility	**20%**	20%
Option life	**Six months**	Six months
Risk free rate	**0.3%**	-0.1%
Dividend yield	**1.0%**	1.5%
Possibility of forfeiture	**7.5% p.a.**	7.5% p.a.
Fair value per option at grant date	**2094.0p**	1337.2p
Option pricing model	**Black Scholes**	Black Scholes

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

	2021		2020	
	Number	**Weighted average exercise price**	Number	Weighted average exercise price
Outstanding at 1 January	**230,705**	**4243p**	241,912	3681p
Granted	**55,474**	**7327p**	74,578	4804p
Forfeited	**(11,177)**	**4524p**	(6,659)	3895p
Exercised	**(62,581)**	**4081p**	(79,126)	3081p
Outstanding at 31 December	**212,421**	**5082p**	230,705	4243p
Exercisable at 31 December	**4,434**	**4144p**	3,745	3092p
For options exercised in year, weighted average share price at date of exercise		**9206p**		5969p
Weighted average remaining life at 31 December (years)	**2.4**		2.4	

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

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

	2021	2020
Grant date	**16 Sep 2021**	10 Sep 2020
Share price at grant date	**9144p**	6078p
Exercise price	**7327p**	4804p
Number of employees	**2,973**	2,287
Shares under option	**202,071**	226,138
Vesting period	**Three years**	Three years
Expected volatility	**20%**	20%
Option life	**One month**	One month
Risk free rate	**0.3%**	-0.2%
Dividend yield	**0.9%**	1.4%
Possibility of forfeiture	**7.5% p.a.**	7.5% p.a.
Fair value per option at 31 December	**2934.8p**	1741.3p
Option pricing model	**Black Scholes**	Black Scholes

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

	2021 Number	2021 Weighted average exercise price	2020 Number	2020 Weighted average exercise price
Outstanding at 1 January	**681,756**	**4262p**	726,941	3704p
Granted	**202,071**	**7327p**	226,138	4804p
Forfeited	**(57,397)**	**4519p**	(48,929)	3725p
Exercised	**(173,185)**	**4141p**	(222,394)	3106p
Outstanding at 31 December	**653,245**	**5227p**	681,756	4262p
For options exercised in year, weighted average share price at date of exercise		**9378p**		6063p
Weighted average remaining life at 31 December (years)	**1.8**		1.9	

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

The PSP scheme was established in 2014 and replaced the Company's previous Executive long-term incentive plans. The PSP provides for awards of free shares (i.e. either conditional shares or nil-cost options) normally made annually which vest after three years dependent upon an EPS performance related sliding scale (non-market condition), an NPP growth measure (non-market condition), sustainability conditions in relation to decarbonisation roadmaps and emissions (non-market conditions) and the Group's total shareholder return (market condition). The PSP is discussed in detail in the Directors' Remuneration Report (pages 84 to 108). Shares (on an after-tax basis) are subject to a two-year post vesting holding period. For options granted in the year, the fair value per option granted and the assumptions used in the calculation of the value are as follows:

	2021 Market condition	2021 Non-market condition	2020 Market condition	2020 Non-market condition	2020 Market condition	2020 Non-market condition
Grant date	**24 Mar 2021**	**24 Mar 2021**	29 Apr 2020	29 Apr 2020	25 Mar 2020	25 Mar 2020
Share price at grant date	**6401p**	**6401p**	4936p	4936p	4280p	4280p
Number of employees	**68**	**68**	2	2	57	57
Shares under conditional award	**45,546**	**84,585**	16,956	31,491	44,053	81,812
Vesting period	**Three years**	**Three years**	Three years	Three years	Three years	Three years
Expected volatility	**20%**	**20%**	20%	20%	20%	20%
Dividend yield	**1.4%**	**1.4%**	1.8%	1.8%	2.1%	2.1%
Possibility of forfeiture	**3.45% p.a.**	**3.45% p.a.**	3.45% p.a.	3.45% p.a.	3.45% p.a.	3.45% p.a.
Fair value per option at grant date	**2420p**	**6136p**	3352p	4676p	3022p	4021p
Option pricing model	**Closed form valuation**	**Closed form valuation**	Closed form valuation	Closed form valuation	Closed form valuation	Closed form valuation

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

	2021 Number	2021 Weighted average exercise price	2020 Number	2020 Weighted average exercise price
Outstanding at 1 January	**461,005**	**–**	513,956	–
Granted	**130,131**	**–**	174,312	–
Forfeited	**(108,077)**	**–**	(112,018)	–
Exercised	**(56,759)**	**–**	(115,245)	–
Outstanding at 31 December	**426,300**	**–**	461,005	–
For options exercised in year, weighted average share price at date of exercise		**6205p**		4259p
Weighted average remaining life at 31 December (years)	**1.3**		1.3	

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

The DBSP scheme was established in 2014. Under the DBSP, one third of any annual bonuses due to certain senior executives are deferred. The size of award is determined by the amount of the total bonus divided by one third and converted into a number of Croda shares using the market value of shares at the time the award is granted. Awards are increased by the number of shares equating to the equivalent value of any dividend paid during the option period. The awards vest on the third anniversary of the date of grant unless the recipient has been dismissed for cause. No further awards were granted after 2019. There are no performance conditions applied to the award. The DBSP is also discussed in the Directors' Remuneration Report (pages 84 to 108).

23. Share-based payments continued

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

	2021 Number	2021 Weighted average exercise price	2020 Number	2020 Weighted average exercise price
Outstanding at 1 January	**28,127**	**–**	127,588	–
Dividend enhancement	**101**	**–**	422	–
Exercised	**(19,315)**	**–**	(99,883)	–
Outstanding at 31 December	**8,913**	**–**	28,127	–
For options exercised in year, weighted average share price at date of exercise		**6205p**		4259p
Weighted average remaining life at 31 December (years)	**0.2**		0.5	

Croda International Plc Restricted Share Plan ('RSP')

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

	2021	2020
Grant date	**17 Mar 2021**	25 Mar 2020
Share price at grant date	**6314p**	4280p
Number of employees	**66**	35
Shares under conditional award	**8,621**	7,134
Vesting period	**Three years**	Three years
Expected volatility	**20%**	20%
Dividend yield	**1.4%**	2.1%
Possibility of forfeiture	**3.45% p.a.**	3.45% p.a.
Fair value per option at grant date	**6049p**	4021p
Option pricing model	**Closed form valuation**	Closed form valuation

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

	2021 Number	2021 Weighted average exercise price	2020 Number	2020 Weighted average exercise price
Outstanding at 1 January	**19,288**	**–**	12,393	–
Granted	**8,621**	**–**	7,134	–
Forfeited	**(693)**	**–**	(239)	–
Exercised	**(6,258)**	**–**	–	–
Outstanding at 31 December	**20,958**	**–**	19,288	–
For options exercised in year, weighted average share price at date of exercise		**6257p**		–
Weighted average remaining life at 31 December (years)	**1.5**		1.3	

Croda International Plc Free Share Plan ('FSP')

The FSP scheme was established in 2021 and provides for awards of free shares or cash equivalent to eligible employees. The Company has discretion to set the number of shares awarded. The awards will vest provided that the employee remains employed by the Group and that a bonus payment is paid under the terms of the Company's Group Profit Incentive Bonus Scheme in respect of the financial year concerned. Subject to the two conditions being met, on the vesting date, UK employees (and certain other identified jurisdictions) will be awarded free shares and non-UK employees will be paid a cash equivalent based on the market price.

	2021	2020
Grant date	**3 Nov 2021**	–
Share price at grant date	**9597p**	–
Number of employees	**5,237**	–
Shares under conditional award	**52,370**	–
Vesting period	**One year**	–
Expected volatility	**20%**	–
Dividend yield	**1.0%**	–
Possibility of forfeiture	**7.5% p.a.**	–
Fair value per option at grant date	**9503p**	–
Option pricing model	**Closed form valuation**	–

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

	2021 Number	**2021 Weighted average exercise price**	2020 Number	2020 Weighted average exercise price
Outstanding at 1 January	**–**	**–**	–	–
Granted	**52,370**	**–**	–	–
Forfeited	**(790)**	**–**	–	–
Exercised	**–**	**–**	–	–
Outstanding at 31 December	**51,580**	**–**	–	–
For options exercised in year, weighted average share price at date of exercise		**–**		–
Weighted average remaining life at 31 December (years)	**0.3**		–	

Croda International Plc Share Incentive Plan ('SIP')

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

24. Preference share capital

	2021 £m	2020 £m
The authorised, issued and fully paid preference share capital comprises:		
615,562 5.9% preference shares of £1 (2020: 615,562)	**0.6**	0.6
498,434 6.6% preference shares of £1 (2020: 498,434)	**0.5**	0.5
21,900 7.5% preference shares of £1 (2020: 21,900)	**–**	–
	1.1	1.1

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

25. Shareholders' equity

Croda International Plc Qualifying Share Ownership Trust (QUEST), Croda International Plc Employee Benefit Trust (CIPEBT) and Croda International Plc AESOP Trust (AESOP) each hold shares purchased on the open market or transferred from treasury shares to satisfy the future issue of shares under the Group's share option schemes. As at 31 December 2021 the QUEST had a net amount due from the Company of £16.1m (2020: £13.6m) and held 30,640 (2020: 93,221) shares transferred at a nil cost (2020: nil cost) with a market value of £3.1m (2020: £6.1m). As at 31 December 2021 the CIPEBT was financed by a repayable on demand loan to the Company of £26.9m (2020: £21.9m) and held 910 (2020: 910) shares transferred at a nil cost (2020: nil cost) with a market value of £0.1m (2020: £0.1m).

As at 31 December 2021 the AESOP had issued all its previously held shares, as financed by the Company, and thus had no residual loan balance with the Company. All of the shares held by the QUEST and CIPEBT were under option at 31 December 2021 and, except for a nominal amount, the right to receive dividends has been waived.

As at 31 December 2021 the total number of treasury shares held was 3,018,203 (2020: 3,018,203) with a market value of £303.2m (2020: £199.1m).

26. Non-controlling interests in equity

	2021 £m	2020 £m
At 1 January	**9.3**	7.0
Exchange differences	**0.1**	0.1
Profit for the year	**2.0**	–
Acquisition of a subsidiary with non-controlling interest	**1.6**	2.2
Acquisition of a non-controlling interest in an existing subsidiary	**(0.2)**	–
Issue of share capital	**0.2**	–
Dividends paid to non-controlling interests	**(0.2)**	–
At 31 December	**12.8**	9.3

27. Related party transactions

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

28. Business combinations

2021 Acquisitions

On 2 March 2021, the Group acquired the worldwide business activities of Alban Muller including 100% of the shares and voting interests of Acallmi for a total consideration of £15.2m. Established in France and employing 90 people, Alban Muller specialises in eco-responsible solutions to developing innovative botanical extracts, natural formulation ingredients and natural organic cosmetics. The company is an excellent fit for Croda's Beauty Actives business (part of the Consumer Care sector) and provides Croda with access to innovative technology in the botanicals market.

On 1 June 2021, the Group acquired a 96% majority shareholding in Parfex S.A. ('Parfex'), a fine fragrance business based in Grasse, France for a total consideration of £35.4m. Employing 75 people, Parfex creates fragrances principally for premium personal care and fine perfumery markets, leveraging the natural raw materials that are available in the region. The company will form part of the newly created Fragrances & Flavours business (part of the Consumer Care sector) alongside Iberchem acquired in November 2020.

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

	Alban Muller £m	Parfex £m
Cash consideration	**15.2**	**35.4**
Fair value of assets and liabilities acquired		
Intangible assets	8.9	19.5
Property, plant and equipment	7.1	5.9
Right of use assets	1.2	0.1
Lease liabilities	(1.2)	(0.1)
Cash/(overdrafts)	1.8	(0.1)
Borrowings	(5.7)	–
Working capital	–	4.6
Retirement benefit liabilities	(0.4)	(0.5)
Deferred tax	(3.0)	(5.9)
Total identifiable net assets	**8.7**	**23.5**
Fair value of NCI	–	(1.6)
Goodwill	**6.5**	**13.5**

Total cash consideration paid in the period of £58.1m includes the above acquisitions (net of cash) of £48.9m and £9.2m of payment on contingent consideration in respect of previous acquisitions. Acquisition-related costs of £1.5m have been charged to administration expenses in the income statement for the year ended 31 December 2021 (2020: £11.7m). Post-acquisition, Alban Muller and Parfex contributed combined revenue of £23.3m and a small adjusted operating profit. Had the acquisitions been made on 1 January 2021, the Group's revenue would have been £1,924.7m with adjusted operating profit of £469.8m.

2020 Acquisitions

On 12 August 2020, the Group acquired 100% of the shares and voting interests of Avanti Polar Lipids, LLC ('Avanti'), a knowledge-intensive leader in lipid-based drug delivery technologies for next generation pharmaceuticals. Based in Alabama in the US, Avanti creates and makes high-purity polar lipids that are increasingly being used as delivery systems for complex therapeutic drugs and in next-generation mRNA vaccines. The acquisition will continue to operate under its existing brand, led by the current management team, and will form part of our Health Care business (Life Sciences sector). The acquisition will more than double Croda's research and development (R&D) capability in drug delivery and also provide a new channel to market for Croda's ingredients for early-stage pharmaceutical research. Avanti was acquired for total consideration of £173.9m, with identifiable net assets of £112.8m, generating goodwill of £61.1m. Total consideration for Avanti is inclusive of £35.5m contingent consideration, representing the gross fair value at the date of acquisition of £42.1m before discounting. The additional consideration is payable semi-annually over three years based on the revenue from near-term commercial opportunities using Avanti's lipid-based solutions which were not included in the valuation for payment of the initial consideration.

On 24 November 2020, the Group acquired 100% of the shares and voting interests of Fragrance Spanish Topco, S.L. trading as Iberchem ('Iberchem'), a leading global fragrances and flavours ('F&F') company. Headquartered in Murcia, Spain, Iberchem has approximately 850 employees, 14 manufacturing facilities, 10 R&D centres and a commercial presence in 120 countries. The acquisition will form part of the new Consumer Care sector from 2021. The acquisition will create a new full service formulation and fragrance offering for Personal Care and Home Care as well as providing access to a high growth adjacency in the global F&F market with significant exposure to emerging markets. Iberchem was acquired for consideration of £756.5m, with identifiable net assets of £304.7m, generating goodwill of £454.0m.

During 2021, the Group completed the fair value review relating to its 2020 acquisitions. This review did not identify any changes to the asset base or goodwill.

Company Balance Sheet

at 31 December 2021

	Note	2021 £m	2020 £m
Fixed assets			
Intangible assets	D	**0.8**	0.8
Tangible assets	E	**1.3**	1.5
Investments			
Shares in Group undertakings	F	**1,385.6**	1,369.5
Retirement benefit assets	K	**0.8**	–
		1,388.5	1,371.8
Current assets			
Debtors	G	**1,373.2**	1,479.5
Deferred tax asset	H	**0.4**	0.1
Cash and cash equivalents		**15.9**	–
		1,389.5	1,479.6
Current liabilities			
Creditors: Amounts falling due within one year	I	**(76.1)**	(64.9)
Borrowings	J	**–**	(0.4)
		(76.1)	(65.3)
Net current assets		**1,313.4**	1,414.3
Total assets less current liabilities		**2,701.9**	2,786.1
Non-current liabilities			
Deferred tax liability	H	**(0.2)**	–
Borrowings	J	**(525.2)**	(495.4)
Retirement benefit liabilities	K	**–**	(0.7)
		(525.4)	(496.1)
Net assets		**2,176.5**	2,290.0
Capital and reserves			
Ordinary share capital		**15.1**	15.1
Preference share capital		**1.1**	1.1
Called up share capital		**16.2**	16.2
Share premium account		**707.7**	707.7
Reserves[1]		**1,452.6**	1,566.1
Total shareholders' funds		**2,176.5**	2,290.0

1 Included within Reserves is profit after tax of £2.2m (2020: £43.0m)

The financial statements on pages 162 to 167 were approved by the Board on 28 February 2022 and signed on its behalf by

Anita Frew
Chair

Jez Maiden
Group Finance Director

Registered in England number 206132

Company Statement of Changes in Equity

for the year ended 31 December 2021

	Note	Share capital £m	Share premium account £m	Capital redemption reserve £m	Revaluation reserve £m	Other reserves £m	Retained earnings £m	Total £m
At 1 January 2020		15.1	93.3	0.9	2.1	–	1,630.7	1,742.1
Profit for the year attributable to equity shareholders		–	–	–	–	–	43.0	43.0
Other comprehensive income		–	–	–	–	–	9.7	9.7
Transactions with owners:								
Dividends on equity shares	8	–	–	–	–	–	(115.9)	(115.9)
Share-based payments		–	–	–	–	–	2.5	2.5
Issue of ordinary shares		1.1	614.4	–	–	–	–	615.5
Transactions in own shares		–	–	–	–	–	(6.9)	(6.9)
Total transactions with owners		1.1	614.4	–	–	–	(120.3)	495.2
Total equity at 31 December 2020		**16.2**	**707.7**	**0.9**	**2.1**	**–**	**1,563.1**	**2,290.0**
At 1 January 2021		16.2	707.7	0.9	2.1	–	1,563.1	2,290.0
Profit for the year attributable to equity shareholders		–	–	–	–	–	2.2	2.2
Other comprehensive (expense)/income		–	–	–	–	(0.2)	9.1	8.9
Transactions with owners:								
Dividends on equity shares	8	–	–	–	–	–	(132.5)	(132.5)
Share-based payments		–	–	–	–	–	10.3	10.3
Transactions in own shares		–	–	–	–	–	(2.4)	(2.4)
Total transactions with owners		–	–	–	–	–	(124.6)	(124.6)
Total equity at 31 December 2021		**16.2**	**707.7**	**0.9**	**2.1**	**(0.2)**	**1,449.8**	**2,176.5**

Other reserves include the Hedging Reserve of £4.0m (2020: £Nil) and the Cost of Hedging Reserve of £(4.2)m (2020: £Nil).

Of the retained earnings, £852.7m (2020: £720.0m) are realised and £597.1m (2020: £843.1m) are unrealised. Details of investments in own shares are disclosed in note 25 of the Group financial statements.

Notes to the Company Financial Statements

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

A. Accounting policies

Basis of accounting

The Company meets the definition of a qualifying entity under Financial Reporting Standard 100 (FRS 100) issued by the Financial Reporting Council. These financial statements were prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework ("FRS 101"). In preparing these financial statements, the Company applies the recognition, measurement and disclosure requirements of UK-adopted international accounting standards, but makes amendments where necessary in order to comply with the Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken. The financial statements have been prepared under the historical cost convention, in compliance with the provisions of the Act and the requirements of the Listing Rules of the Financial Conduct Authority.

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

Going concern

The financial statements which appear on pages 162 to 167 have been prepared on a going concern basis as, after making appropriate enquiries, including a review of forecasts, budgets and banking facilities, the Directors have a reasonable expectation that the Company has adequate resources to continue in operational existence.

Principal accounting policies

The accounting policies which have been applied by the Company when preparing the financial statements are in accordance with FRS 101. FRS 101 is based on the recognition and measurement requirements of Adopted IFRSs, under which the Group financial statements have been prepared. As a result, the accounting policies of the Company are consistent with those used by the Group as presented on pages 125 to 131, except for those relating to the recognition and measurement of goodwill and the recognition of revenue, which are not directly relevant to the Company financial statements. Investments are held at cost less accumulated impairment. Investments are subject to impairment testing upon indication of impairment, at which point the carrying value is reviewed against the underlying net assets or forecast cash generation of the entity.

The Group accounting policy for financial risk factors is also relevant to the preparation of the Company financial statements and is disclosed on pages 153 and 154.

B. Profit and loss account

Of the Group's profit for the year, £2.2m (2020: £43.0m) is included in the profit and loss account of the Company which was approved by the Board on 28 February 2022 but which is not presented as permitted by Section 408 Companies Act 2006.

Included in the Company profit and loss account is a charge of £0.2m (2020: £0.1m) in respect of the Company's audit fee.

C. Employees

	2021 £m	2020 £m
Company employment costs including Directors		
Wages and salaries	**13.1**	6.7
Share-based payment charges (note L)	**5.9**	1.2
Social security costs	**1.9**	1.1
Post-retirement benefit costs	**0.8**	0.7
	21.7	9.7

	2021 Number	2020 Number
Average employee numbers by function		
Production	**21**	15
Administration	**41**	39
	62	54

As required by the Companies Act 2006, the figures disclosed above are weighted averages based on the number of employees including Executive Directors. At 31 December 2021, the Company had 69 (2020: 54) employees in total.

Detailed information concerning Directors' remuneration, interests and options is shown in section D of the Directors' Remuneration Report, which is subject to audit, on pages 97 to 105 which forms part of the Annual Report and Accounts.

D. Intangible assets

	Computer software £m
Cost	
At 1 January 2021	1.6
Additions	0.2
At 31 December 2021	**1.8**
Accumulated amortisation	
At 1 January 2021	0.8
Charge for the year	0.2
At 31 December 2021	**1.0**
Net carrying amount	
At 31 December 2021	**0.8**
At 31 December 2020	0.8

E. Tangible assets

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2021	2.2	1.8	4.0
Disposals	–	(0.2)	(0.2)
At 31 December 2021	**2.2**	**1.6**	**3.8**
Accumulated depreciation			
At 1 January 2021	1.5	1.0	2.5
Charge for the year	–	0.2	0.2
Disposals	–	(0.2)	(0.2)
At 31 December 2021	**1.5**	**1.0**	**2.5**
Net book amount			
At 31 December 2021	**0.7**	**0.6**	**1.3**
At 31 December 2020	0.7	0.8	1.5

F. Shares in Group undertakings

	Shares £m	Loans £m	Total £m
Cost			
At 1 January 2021	1,111.3	287.5	1,398.8
Exchange differences	–	(6.3)	(6.3)
Additions	4.9	148.2	153.1
Amounts repaid	(0.3)	(130.4)	(130.7)
At 31 December 2021	**1,115.9**	**299.0**	**1,414.9**
Impairment			
At 1 January 2021	27.8	1.5	29.3
Impairment in the year	–	–	–
At 31 December 2021	**27.8**	**1.5**	**29.3**
Net book value			
At 31 December 2021	**1,088.1**	**297.5**	**1,385.6**
At 31 December 2020	1,083.5	286.0	1,369.5

The undertakings which affect the financial statements are listed on pages 168 to 170.

Additions to shares in the year of £0.5m relate to the continued investment in Cowick Insurance Services Ltd and £4.4m of capital contributions in relation to share-based payments.

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

Notes to the Company Financial Statements (continued)

G. Debtors

	2021 £m	2020 £m
Amounts owed by Group undertakings	**1,325.2**	1,452.2
Corporation tax	**46.4**	27.0
Other receivables	**–**	0.1
Prepayments	**1.6**	0.2
	1,373.2	1,479.5

Although the amounts owed by Group undertakings have no fixed date of repayment, £1,324.6m (2020: £1,450.2m) is expected to be collected after one year. Of the amount at 31 December 2021, £1,324.1m will continue to attract interest from 1 January 2022 at a floating rate based on the main facility agreement. The remainder will continue to be interest free.

H. Deferred tax

The deferred tax (liabilities)/assets included in the balance sheet are attributable to the following:

	2021 £m	2020 £m
Retirement benefit obligations	**(0.2)**	0.1
Cash flow hedging	**0.4**	–
	0.2	0.1
The movement on deferred tax balances during the year is summarised as follows:		
At 1 January	**0.1**	0.4
Deferred tax credited/(charged) through the profit and loss account	**0.3**	(0.2)
Deferred tax charged to other comprehensive income	**(0.2)**	(0.1)
At 31 December	**0.2**	0.1

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

I. Creditors: Amounts falling due within one year

	2021 £m	2020 £m
Amounts falling due within one year		
Trade payables	**0.5**	2.3
Taxation and social security	**2.2**	1.5
Amounts owed to Group undertakings	**54.6**	51.0
Other payables	**3.3**	3.3
Accruals and deferred income	**15.5**	6.8
	76.1	64.9

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

J. Borrowings

The Company's objectives, policies and strategies in respect of financial instruments are outlined in the accounting policies note on page 130 which forms part of the Annual Report and Accounts. Short-term receivables and payables have been excluded from all of the following disclosures.

	2021 £m	2020 £m
Maturity profile of financial liabilities		
2019 Club facility due 2026	**234.4**	196.1
€30m 1.08% fixed rate 7 year note	**25.2**	26.8
€70m 1.43% fixed rate 10 year note	**58.7**	62.7
£30m 2.54% fixed rate 7 year note	**30.0**	30.0
£70m 2.80% fixed rate 10 year note	**70.0**	70.0
€50m 1.18% fixed rate 8 year note	**41.9**	44.8
£65m 2.46% fixed rate 8 year note	**65.0**	65.0
Bank loans and overdrafts repayable on demand	**–**	0.4
	525.2	495.8
Repayments fall due as follows:		
Within one year		
Bank loans and overdrafts	**–**	0.4
	–	0.4
After more than one year		
Loans repayable		
Within one to five years	**418.3**	252.9
After five years	**106.9**	242.5
	525.2	495.4

K. Post-retirement benefits

In line with the requirements of FRS 101, the Company recognises its share of the UK pension scheme assets and liabilities based on the number of scheme members. A full reconciliation of the Group retirement benefit obligation can be found in note 11 of the Group financial statements on pages 139 to 143. The table below shows the movement in the obligation during the year.

	2021 £m	2020 £m
Opening balance:		
Assets	**56.0**	53.2
Liabilities	**(56.7)**	(55.2)
Net opening retirement benefit liability	**(0.7)**	(2.0)
Movements in the year:		
Service cost – current	**(0.8)**	(0.7)
Contributions	**0.8**	1.4
Remeasurements	**1.5**	0.6
Closing balance	**0.8**	(0.7)

L. Share-based payments

The total charge for the year in respect of share-based remuneration schemes was £5.9m (2020: £1.2m). The grant by the Company of options over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity.

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

M. Contingent liabilities

The Company has guaranteed loan capital and bank overdrafts of subsidiary undertakings amounting to £272.3m (2020: £285.3m).

N. Dividends

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

O. Related party transactions

The Company has taken advantage of the exemption available under FRS 101 from disclosing transactions with other Group undertakings. There were no other related party transactions during the year. Information on the Group can be found in note 27 on page 160 of the Group financial statements.

Related Undertakings

Related undertakings of Croda International Plc

All companies listed below are owned by the Group and all interests are in ordinary share capital, except where otherwise indicated. All subsidiaries have been consolidated. All companies operate principally in their country of incorporation. Unless otherwise indicated, all shareholdings represent 100% of the issued share capital of the subsidiary.

Wholly owned subsidiaries:

Incorporated in the UK

Cowick Hall, Snaith, Goole, East Yorkshire, DN14 9AA
Bio Futures Limited (vii)
Brookstone Chemicals Limited (viii)
Cowick Hall Trustees Limited (xi)
Croda (Goole) Limited (viii)
Croda Application Chemicals Limited (viii)
Croda Bakery Services Limited (viii)
Croda Bowmans Chemicals Limited (v) (viii)
Croda CE Limited (viii)
Croda Chemicals Limited (viii)
Croda Colloids Limited (viii)
Croda Cosmetics & Toiletries Limited (i) (v) (viii)
Croda Cosmetics (Europe) Limited (iii) (viii)
Croda Distillates Limited (i) (x)
Croda Enterprises Limited (viii)
Croda Europe Limited (i) (vii)
Croda Fire Fighting Chemicals Limited (viii)
Croda Food Services Limited (viii)
Croda Foundation (xiv)
Croda Hydrocarbons Limited (viii)
Croda Investments Limited (ix)
Croda Investments No 2 Limited (ix)
Croda Investments No 3 Limited (ix)
Croda JDH Limited (viii)
Croda Leek Limited (viii)
Croda Limited (viii)
Croda Overseas Holdings Limited (i) (ix)
Croda Pension Trustees Limited (viii)
Croda Polymers International Limited (i) (ix)
Croda Resins Limited (viii)
Croda Solvents Limited (iii) (iv) (viii)
Croda Trustees Limited (viii)
Croda Universal Limited (viii)
Croda World Traders Limited (i) (v) (viii)
Equus UK Holding Limited (vii)
Equus UK Topco Limited (i) (vii)
P.I. Bioscience Limited (vii)
Plant Impact Limited (ix)
John L Seaton & Co Limited (viii)
Southerton Investments Limited (i) (viii)
Sowerby & Co Limited (viii)
Technical and Analytical Services Limited (i) (viii)
Uniqema Limited (i) (viii)
Uniqema UK Limited (i) (viii)

c/o Cutitronics Limited, Torus Building, Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, G75 0QF
Croda (CPI) Limited (ix)

Incorporated in China

Unit BCD, 19 Floor, Urban City Center, No.45, Nanchang Road, Shanghai
Croda China Trading Company Ltd (vii)

No. 2 Xiang Shan Avenue, Ning Xi Street, Zeng Cheng District, Guangzhou, China
Croda Iberchem (Guangzhou) Fragrance and Flavour Manufacturing Co., Ltd (vi) (viii)

Unit 501, 5th floor (actual 4th floor), Nominal floor, Block B (No.1 Building), No.3 Linhong Road, Changning District, Shanghai
Croda (Shanghai) Specialty Materials Co., Ltd (vii)

191 Dong Jiang Street, GET Development Zone, 510730 Guangzhou
Guangzhou Iberchem, Co. Ltd (vii)

2nd Floor, No. 21, Eastern of Yonyou Industrial Park, No. 9 Yongfeng Road, Haidian District, Beijing
Incotec (Beijing) Agricultural Technology Co. Ltd (vii)

No.3 Plant, No.202, Huashan Road, Modern Industrial Zone, Tianjin Development Zone, Tianjin
Incotec (Tianjin) Agricultural Science & Technology Co. Ltd (vii)

No.656 East Tangxun Road, Economic-Technological Development Zone, Mianyang, Sichuan 621000
Sichuan Xihe Rape Seed Industry Co., Ltd (vii)

No.139, Jianqing Road, Pu'an Town, Jiange County Guangyuan, Sichuan, 628300
Sichuan Xiyuan Grease Chemical Co., Ltd (vii)

Incorporated in France

9, rue Jean Monnet, 28630 Fontenay Sur Eure
Alban Muller International (vii)

1, rue de Lapugnoy, 62920 Chocques
Croda Chocques SAS (vii)

Futura III, 1, avenue de Westphalie, 78180 Montigny-le-Bretonneux
Croda France SAS (vii)
Croda Holdings France SAS (ix)

Zone artisanale, 48230 Chanac
Crodarom SAS (vii)

29 rue du Chemin Vert, 78610, Le Perray en Yvelines
Sederma SAS (vii)

Incorporated in the Netherlands

Buurtje 1, 2802 BE Gouda
AM Coatings BV (v) (viii)
Croda EU BV (ix)
Croda Nederland B.V. (vii)

Westeinde 107, 1601 BL Enkhuizen
Incotec Europe B.V. (vii)
Incotec Group B.V. (i) (ix)
Incotec Holding B.V. (ix)

Incorporated in the USA

700 Industrial Park Drive, Alabaster, AL 35007
Avanti Polar Lipids, LLC (vii)

777 Scudders Mill Road, Building 2, Suite 200, Plainsboro, NJ 08536
Croda Americas LLC (viii)
Croda Finance Inc (viii)
Croda Inc. (vii)
Croda Inks Corp (viii)
Croda Investments Inc (ix)
Croda Storage Inc (viii)
Croda Synthetic Chemicals Inc (ix)
Mona Industries Inc (viii)
Sederma Inc (vii)

1293 Harkins Road, Salinas, CA 93901
Incotec Integrated Coating and Seed Technology, Inc (vii)

Incorporated in other overseas countries

Argentina – Office Dardo Rocha 2044, 1640, Martinez, Buenos Aires
Croda Argentina SA (vii)

Australia – Suite 2, Level 6, 111 Phillip Street, Parramatta, NSW 2150
Croda Australia Pty Ltd (vii)

Brazil – Rua Croda, 580, Distrito Industrial, Campinas, São Paulo, CEP 13.074-710
Croda do Brasil Ltda (vii)

Brazil – AFAS Adviser Consultores Associados Ltda, Rua Manuel de Nóbrega, 1.280, 10º andar, Paraíso, São Paulo, CEP 04001-902
Iberchem Brazil Participaçoes Ltda (viii)

Canada – 1700 Langstaff Road, Suite 1000, Vaughan, Ontario, L4K 3S3
Croda Canada Ltd (vii)

Chile – Los Militares 4611, 17th Floor – 7560968, Las Condes, Santiago
Croda Chile Ltda (vi) (vii)

Colombia – Calle 90 # 19-41 Office 601, Bogotá
Croda Colombia (i) (vii)

Colombia – Aut. Medellín km. 7, Bodega 88-02, Celta Trade Park, Funza, Cundinamarca
Iberchem Colombia SAS (vii)

Czech Republic – Praha 5, Pekařská 603/12, 150 00
Croda Spol. s.r.o (vii)

Denmark – Elsenbakken 23, 3600 Frederikssund
Croda Denmark A/S (vii)

Finland – Hepolamminkatu 29, 33720 Tampere
IonPhasE Oy (vii)

Germany – Herrenpfad Süd 33, 41334 Nettetal
Croda GmbH (vii)
Sederma GmbH (vii)

Germany – Dr.-Hans-Wilhelmi-Weg 1, 35633 Lahnau
Rewitec GmbH (vii)

Guernsey – PO Box 33, Dorey Court, Admiral Park, St Peter Port, GY1 4AT
Cowick Insurance Services Ltd (i) (xii)

Hong Kong – Room 908, East Ocean Centre, No.9 Science Museum Road, Tsim Sha Tsui, East Kowloon
Croda Hong Kong Company Ltd (vii)

Hong Kong – Kreston CAC CPA Ltd, Rooms 2702-3, 27th Floor, Bank of East Asia Harbour View Centre, 56 Gloucester Road, Wan Chai
IonPhaseE (H.K.) Limited (vii)

Hungary – 1117 Budapest XI, Bölcso utca 6. 1. emelet 4.
Croda Magyarorszag Kft (i) (vii)

India – Plot No. 1/1, Part TTC Industrial Area, Thane Belapur Road, Koparkhairne, Navi Mumbai 400710, Maharashtra
Croda India Company Private Ltd (i) (vii)

India – 38/A, Radhe Industrial Estate, Tajpur Road, Changodar 382213, Ahmedabad
Iberchem India Ltd (vii)

India – 47, Mahagujarat Industrial Estate, Opp. Pharma Lab, Sarkhej-Bavla Highway, At. Moraiya, Ta. Sanand, Ahmedabad-382213, Gujarat
Integrated Coating and Seed Technology India Pvt. Ltd (vii)

Indonesia – Kawasan Industri Jababeka, Jl. Jababeka IV Blok V Kav 74-75, Cikarang Bekasi 17530
PT Croda Indonesia (iii) (iv) (vii)

Indonesia – Palma Tower , 17th Floor, Jl. RA Kartini II-S Kav.6 , Jakarta 12310
PT Croda Trading Indonesia (vii)

Indonesia – Pusat Niaga Terpadu, Jl. Daan Mogot Raya Km 19, 6 Blok GG8N, 15122 Tangerang
PT Scentium Flavours (vii)

Iran – Apt. 305, 3rd Floor, No 14 Golestan Avenue, Alikhani Avenue, Southern Shiraz Street, Tehran
Croda Pars Trading Co (vii)

Italy – Via P. Grocco 915, 27036 Mortara
Croda Italiana S.p.A. (vii)

Italy – Via del Commercio, 2, Desio (MB)
Iberchem Italia SRL (vii)

Japan – 7-1 Nishi-shinjuku 3-chome, Shinjuku-ku, Tokyo 163-1001
Croda Japan KK (i) (vii)

Malaysia – 6 Jalan Anggerik Mokara 31/54, Kota Kemuning, Section 31, 40460 Shah Alam, Selangor Darul Ehsan
Flavor Inn Corporation Sdn Bhd (vii)

Mexico – Hamburgo 213, Piso 10, Colonia Juárez, Delegacion Cuauhtémoc, D.F., C.P. 06600
Croda México SA de CV (vii)

Mexico – Alfredo Nobel No. 3, 3 y 4, Col. Fraccionamiento Industrial Los Reyes, Estado de México, 54073 Tlalnepantla
Iberchem Mexico SA de CV (vii)

Nigeria – Landmark Towers, 5B, Water Corporation Road, Victoria Island, Lagos
Croda SI&T Nigeria Limited (vii)

Peru – Av. Juan de Aliaga 425 Of. 401, Magdalena del Mar
Croda Peruana S.A.C (vii)

Poland – ul. Wadowicka 6, 30-415 Kraków
Croda Poland Sp. z o.o. (i) (vii)

Republic of Korea – Rm. 1201, 12th Floor, 42, Hwang Sae Ul-Ro 360 Beon-Gil, Bun Dang-Gu, Seong Nam-Si, Gyeong Gi-Do, 13591
Croda Korea (ii) (vii)

Other information (continued)

Related Undertakings (continued)

Incorporated in other overseas countries continued

Russian Federation – Office 1333, 16 Raketnyi bulvar, Moscow, 129164
Croda RUS LLC (vii)

Singapore – 30 Seraya Avenue, Singapore 627884
Croda Singapore Pte Ltd (i) (v) (vii)

Singapore – 2 International Business Park, #04-06 The Strategy (Tower 1)
Iberchem Far East Pte Ltd (vii)

South Africa – Clearwater Estate Office Park, Block G, Corner of Atlas & Park Road, Parkhaven Ext 8, Boksburg 1459
Croda (SA) (Pty) Ltd (vii)
Incotec South Africa (Pty.) Ltd (vii)

South Africa – 5 Marconi Nook, Hennopspark, Centurion, 0157
Iberchem South Africa (Pty) Ltd (vii)

Spain – Plaza. Francesc Macià, 7, 7ºB, 08029 Barcelona
Croda Ibérica SA (vii)

Spain – Avenida del Descubrimiento, Parcela 9/9, Polígono I, **30820 Alcantarilla, Murcia**
Fragrance Spanish Topco, S.L. (ix)
Iberchem SA (vii)

Sweden – Geijersgatan 2B, 216 18 Limhamn
Croda Nordica AB (vii)
MX Adjuvac AB (xiii)

Vietnam – Room # 606A, Floor 6th, Centre Point Building 106 Nguyen Van Troi Street, Ward 8, Phu Nhuan District, Ho Chi Minh City
The Representative Office of Croda Singapore Pte Ltd in Ho Chi Minh City (ii) (vii)

Thailand – 319 Chamchuri Square Building, 16th Floor, Unit 13-14, Payathai Road, Patumwan, Bangkok 10330
Croda (Thailand) Co., Ltd (i) (vii)

Thailand – No. 41/87 Moo 6 Bangna Trad Road Km. 16.5, Bangcha long-Sub District, Bangplee District, 10540 Bangkok, Samutprakarn Province
Iberchem Thailand Ltd (vii)

Turkey – Nidakule Göztepe Is¸ Merkezi, Merdivenköy Mahallesi, Bora Sokak, No: 1 Kat:2/5 Kadıköy 34732, Istanbul
Croda Kimya Ticaret Limited Şirketi (vii)

United Arab Emirates – P. O. BOX 17916, Office 1209, 1210 & 1211, 12th Floor, Jafza One, Tower B, Jebel Ali Free Zone, Dubai
Croda Middle East FZE (vii)

Zimbabwe – 4a Knightsbridge Crescent, Highlands, Harare
Croda Chemicals Zimbabwe Pvt Ltd (viii)

Non-wholly owned subsidiaries, associates and investments:

Incorporated in the UK

3 Huxley Road, Surrey Research Park, Guildford, GU2 7RE

SiSaf Ltd	3.89%

Incorporated in other overseas countries

Brazil – Rua das Sementes nr. 291, Holambra, State of São Paulo

Incotec America do Sul Tecnologia em Sementes Ltda. (vii)	99.99%

China – No 656 East Tangxun Road Economic and Technological Development Zone Miangyang Sichuan

Croda Sipo (Sichuan) Co., Ltd (vii)	65.00%

China – 2nd Industrial Road (E), Changleng Foreign Investment Industrial Park II, Xinjian County, Nanchang City, Jiangxi, 330100

Nanchang Xinduomei Bio-Technology Co.,Ltd (vii)	70.00%

France – 51 avenue Louison Bobet, 06130 Grasse

Parfex (vii)	99.47%

Indonesia – Pusat Niaga Terpadu, Jl. Daan Mogot Raya Km 19, 6 Blok GG8N, 15122 Tangerang

PT Iberchem Indonesia Fragrances (vii)	98.00%

Indonesia – Pusat Niaga Terpadu, Blok EE 8A, Jl, Daan Mogot, Raya, Km.19, Tangerang, 15122, Jakarta West Java, Indonesia

PT Inti Berkah Chemindo (viii)	51.00%

Spain – Avenida de Holanda, Parcela 12/14, Polígono Industrial Las Salinas, 30840 Alhama de Murcia, Murcia

Scentium Flavours, S.L. (vii)	98.60%

Sweden – Scheelevägen 22, 22363 Lund

Enza Biotech AB (xiii)	88.00%

Tunisia – 39, rue Jamel Abdennaceur, Z.I. Borj Cédria, Bir El Bey, BP 69, 2055 Ben Arous

Iberchem Tunisie S.A.R.L. (vii)	63.70%

Turkey – Yeşiltepe Mahallesi İsmetinönü-2 Cad. No:2/57 Tepebaşi, Eskişehir

Entekno Industrial, Technological and Nano Materials Corp.	9.00%

United Arab Emirates – Units 2601 & 2602, Al Manara Tower, Al Abraj St., Business Bay, P.O. Box 191160, Dubai

The Essence of Nature F&F Trading LLC (vii)	49.00%

Classifications Key

(i). Companies owned directly by Croda International Plc
(ii). Branch office
(iii). A Ordinary
(iv). B Ordinary
(v). Preference including cumulative, non-cumulative and redeemable shares
(vi). No share capital, share of profits
(vii). Manufacture, sales or distribution of speciality chemicals, or of seed treatment services and products, or fragrances and flavours compositions
(viii). Dormant
(ix). Holding company
(x). Property holding company
(xi). Trustee
(xii). Captive insurance company
(xiii). Research enterprise
(xiv). Not consolidated; Company limited by Guarantee and not having a Share Capital

Shareholder Information

2022 Annual General Meeting	20 May 2022
2021 Final ordinary dividend payment	6 June 2022
2022 Half year results announcement	26 July 2022
2022 Interim ordinary dividend payment	4 October 2022
2022 Preference dividend payments	30 June 2022
	31 December 2022
2022 Full year results announcement	7 March 2023

Investor relations

Shareholders can now get up to date information on Stock Exchange announcements, key dates in the corporate calendar, the Croda share price and brokers' estimates by visiting our corporate website at www.croda.com and clicking on the section called 'Investors'.

Shareholders can receive shareholder communications electronically by registering on the Registrars' website, www.signalshares.com and following the instructions. To register, shareholders will require their investor code (IVC): this is an 11 digit number starting with five or six zeros and can be found on your dividend tax voucher or your share certificate. Receiving corporate communications by email has a number of benefits including being more environmentally friendly, reducing unnecessary waste, faster notification of information to shareholders and eventually leading to a reduction in company costs.

Shareholders who register on the above website can also check their shareholding, view their dividend history, choose their dividend options, register changes of address and dividend mandate instructions.

Share price information

The latest ordinary share price is available on our website at www.croda.com.

The middle market values of the listed share capital at 31 December 2021, or last date traded*, were as follows:

Ordinary shares	10045p
5.9% preference shares	105.5p*
6.6% preference shares	106.5p*

Dividend reinvestment plan ('DRIP')

Ordinary shareholders may wish to know about this plan, which allows you to use your dividends to buy further shares in Croda. The DRIP is offered to **UK shareholders only** by Link Group which is authorised and regulated by the Financial Conduct Authority.

For information and an application pack please call 0371 664 0381. Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate. Lines are open 9.00am to 5.30pm, Monday to Friday, excluding public holidays in England and Wales. From outside the UK dial +44 (0)208 639 3402). Alternatively you can email shares@linkgroup.co.uk or log on to www.signalshares.com.

Payment of dividends

You can arrange to have your dividends paid direct to your bank account. This means that:

- your dividend reaches your bank account on the payment date;
- it is more secure – cheques can sometimes get lost in the post;
- you don't have the inconvenience of depositing a cheque; and
- helps reduce cheque fraud.

If you have a UK bank account you can sign up to this service on Signal Shares (www.signalshares.com by clicking on 'your dividend options' and following the on-screen instructions) or by contacting the Customer Support Centre.

Overseas shareholders – choose to receive your next dividend in your local currency

If you live outside the UK, Link has partnered with Deutsche Bank to provide you with a service that will convert Sterling dividends into your local currency at a competitive rate.

You can choose to receive payment directly to your local bank account or alternatively you can be sent a currency draft. You can sign up to this service on Signal Shares (www.signalshares.com by clicking on 'your dividend options' and following the on-screen instructions) or by contacting the Customer Support Centre. For further information contact Link:

By phone – UK 0371 664 0300, from overseas +44 (0)371 664 0300. Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate. Lines are open 9.00am to 5.30pm, Monday to Friday, excluding public holidays in England and Wales.

By email – ips@linkgroup.co.uk

Relating to beneficial owners of shares with 'information rights'

Please note that beneficial owners of shares who have been nominated by the registered holder of those shares to receive information rights under section 146 of the Companies Act 2006 are required to direct all communications to the registered holder of their shares rather than to the Company's registrar, Link Group, or to the Company directly.

Share fraud warning

Fraudsters use persuasive and high-pressure tactics to lure investors into scams. They may offer to sell shares that turn out to be worthless or non-existent, or to buy shares at an inflated price in return for an upfront payment. While high profits are promised, if you buy or sell shares in this way you will probably lose your money.

5,000 people contact the Financial Conduct Authority ('FCA') about share fraud each year, with victims losing an average of £20,000.

Shareholder Information (continued)

How to avoid share fraud

- Keep in mind that firms authorised by the FCA are unlikely to contact you out of the blue with an offer to buy or sell shares.
- Do not get into a conversation, note the name of the person and firm contacting you and then end the call.
- Check the Financial Services Register at www.fca.org.uk to see if the person and firm contacting you is authorised by the FCA.
- Beware of fraudsters claiming to be from an authorised firm, copying its website or giving you false contact details.
- Use the firm's contact details listed on the Register if you want to call it back.
- Call the FCA on 0800 111 6768 if the firm does not have contact details on the Register or you are told they are out of date.
- Search the list of unauthorised firms to avoid at www.fca.org.uk/scams.
- Consider that if you buy or sell shares from an unauthorised firm you will not have access to the Financial Ombudsman Service or Financial Services Compensation Scheme.
- Think about getting independent financial and professional advice before you hand over any money.
- **Remember:** if it sounds too good to be true, it probably is!

Report a scam

If you are approached by fraudsters please tell the FCA using the share fraud reporting form at www.fca.org.uk/scams, where you can find out more about investment scams.

You can also call the FCA Consumer Helpline on 0800 111 6768.

If you have already paid money to share fraudsters you should contact Action Fraud on 0300 123 2040.

Secretary and Registered Office

Tom Brophy (Company Secretary)
Cowick Hall, Snaith, Goole, East Yorkshire
DN14 9AA
Tel: +44 (0)1405 860551
Fax: +44 (0)1405 861767
Website: www.croda.com
Registered in England number 206132

Registrars

Link Group
10th Floor, Central Square, 29 Wellington Street, Leeds, LS1 4DL
Tel: 0371 664 0300 (from UK)
+44 (0)371 664 0300 (from overseas)
Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate; lines are open 9.00am to 5.30pm, Monday to Friday excluding public holidays in England and Wales.
Fax: + 44 (0)1484 601512
Website: www.linkgroup.eu
Email: enquiries@linkgroup.co.uk

Independent Auditors

KPMG LLP
15 Canada Square, London, E14 5GL

Principal Financial Advisers

Morgan Stanley & Co. International plc

Principal Solicitors

Freshfields Bruckhaus Deringer LLP

Stockbrokers

Morgan Stanley & Co. International plc
HSBC Bank plc

Financial PR Advisers

Teneo

Other Information

Five Year Record

Earnings

	2021 £m	2020 £m	2019 £m	2018 £m	2017 £m
Turnover	**1,889.6**	1,390.3	1,377.7	1,386.9	1,373.1
Covenant EBITDA[4]	**591.4**	433.4	402.9	408.6	398.1
Adjusted operating profit[1]	**468.6**	319.6	339.7	342.5	332.2
Adjusted profit before tax[1]	**445.2**	300.6	322.1	331.5	320.3
Profit after tax	**322.8**	201.6	223.8	238.3	236.7
Profit attributable to owners of the parent	**320.8**	201.6	223.9	238.5	237.0
Return on sales[1] (%)	**24.8**	23.0	24.7	24.7	24.2
Effective tax rate[1] (%)	**21.2**	24.1	25.6	24.6	26.8
	Pence	Pence	Pence	Pence	Pence
Adjusted earnings per share[1]	**250.0**	175.5	185.0	190.2	179.0
Ordinary dividends per share	**100.0**	91.0	90.0	87.0	81.0
	Times	Times	Times	Times	Times
Net debt/Covenant EBITDA	**1.4**	1.8	1.4	1.0	1.0
Covenant EBITDA interest cover[2]	**22.4**	22.5	23.3	29.8	29.9

Summarised Balance Sheet

	2021 £m	2020 £m	2019 £m	2018 £m	2017 £m
Intangible assets, property, plant and equipment and investments	**2,350.9**	2,297.8	1,301.4	1,240.0	1,072.5
Inventories	**443.0**	302.6	268.9	287.2	258.5
Trade and other receivables	**337.9**	289.9	216.8	233.6	202.2
Trade and other payables	**(370.3)**	(267.6)	(164.7)	(191.3)	(202.5)
Capital employed	**2,761.5**	2,622.7	1,622.4	1,569.5	1,330.7
Tax, provisions and other	**(180.3)**	(194.8)	(131.1)	(127.5)	(88.8)
Retirement benefit assets/(liabilities)	**7.9**	(32.3)	(75.0)	(18.5)	(30.5)
	2,589.1	2,395.6	1,416.3	1,423.5	1,211.4
Shareholders' funds	**1,753.1**	1,585.8	861.6	990.5	822.3
Non-controlling interests	**12.8**	9.3	7.0	7.5	7.6
Net assets	**1,765.9**	1,595.1	868.6	998.0	829.9
Net debt	**823.2**	800.5	547.7	425.5	381.5
Invested capital	**2,589.1**	2,395.6	1,416.3	1,423.5	1,211.4

Return on capital

	2021 £m	2020 £m	2019 £m	2018 £m	2017 £m
Adjusted operating profit net of tax[1]	**369.2**	242.6	252.8	258.2	243.2
Invested capital	**2,589.1**	2,395.6	1,416.3	1,423.5	1,211.4
Adjustments for:					
Goodwill previously written off to reserves	**50.2**	50.2	50.2	50.2	50.2
Accumulated amortisation of acquired intangible assets	**70.6**	36.3	22.7	14.8	8.2
Adjusted invested capital	**2,709.9**	2,482.1	1,489.2	1,488.5	1,269.8
Average adjusted invested capital[3]	**2,596.0**	1,665.6	1,488.9	1,343.6	1,148.6
Return on invested capital (ROIC) (%)	**14.2**	14.6	17.0	19.2	21.2
Post-tax cost of capital (%)	**6.4**	6.2	6.2	5.1	4.8
Charge for invested capital	**(166.1)**	(103.3)	(92.3)	(68.5)	(55.1)
Economic value added[1]	**203.1**	139.3	160.5	189.7	188.1

1 Before exceptional items, amortisation of intangible assets arising on acquisition and the tax thereon where applicable
2 Interest excludes net interest on retirement benefit liabilities
3 The Group acquired Avanti Polar Lipids, LLC on 12 August 2020 and Fragrance Spanish Topco, S.L. ('Iberchem') on 24 November 2020. Given the value of the acquisitions, the Group's measure of average adjusted invested capital for 2020 has been adjusted for the related weighted average impact. The Group acquired Brenntag Biosector A/S on 28 December 2018. Given the value of the acquisition and its proximity to the balance sheet date, the Group's measure of average adjusted invested capital for 2018 has been adjusted for the related impact
4 Covenant EBITDA is EBITDA as defined in the Finance Review but before share-based payment charges and the loss on associates. Covenant EBITDA is also adjusted to reflect the annualised impact of acquisitions in the period.

The five year record is presented based on the applicable accounting standards at the relevant reporting date.

Glossary

Adjusted	Before exceptional items, amortisation of intangible assets arising on acquisition and the tax thereon where applicable
AGM	Annual General Meeting
ALM	Asset-Liability Matching
Bio-based	Carbon containing, from renewable, non-fossil sources
CARE	Career Average Revalued Earnings
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
CGU	Cash Generating Unit
CIPEBT	Croda International Plc Employee Benefit Trust
Code	Financial Reporting Council's 2018 UK Corporate Governance Code
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
Constant currency	Current year results for existing business translated at the prior year's average exchange rates and include the impact of acquisitions
CPI	Consumer Price Index
CPS	Croda Pension Scheme
DRIP	Dividend Reinvestment Plan
DBSP	Deferred Bonus Share Plan
EBITDA	Earnings Before Interest, Taxation, Depreciation and Amortisation
EBT	Employee Benefit Trust
EPS	Earnings per share
EU	European Union
EVA	Economic Value Added
F&F	Fragrances and Flavours
FCA	Financial Conduct Authority
FRC	Financial Reporting Council
FRS	Financial Reporting Standard
FSP	Free Share Plan
FTSE	Financial Times Stock Exchange
GDPR	General Data Protection Regulation
GHG	Greenhouse gas
Scope 1 emissions	Direct emissions from our own, or controlled sources
Scope 2 emissions	Indirect emissions from the generation of purchased electricity, steam, heating and cooling
Scope 3 emissions	All other indirect emissions that occur in our value chain
GMP	Good Manufacturing Practice
HMRC	HM Revenue & Customs
IASB	International Accounting Standards Board

IFRS	International Financial Reporting Standards
IIRC	International Integrated Reporting Council
IP	Intellectual Property
ISO	International Organization for Standardization
ISSB	International Sustainability Standards Board
IT	Information Technology
KPI	Key Performance Indicator
LDI	Liability driven investment
M&A	Mergers and acquisitions
Market sectors	Consumer Care, Life Sciences, Performance Technologies, Industrial Chemicals
NCI	Non-controlling interest
Net debt	Borrowings and other financial liabilities less cash and cash equivalents
NGO	Non-governmental Organisation
NPP	New and protected products
PSP	Performance Share Plan
QUEST	Croda International Plc Qualifying Share Ownership Trust
R&D	Research and Development
Return on sales	Adjusted operating profit divided by revenue
RFT	Right first time
ROIC	Return on Invested Capital
RPI	Retail Price Index
RSP	Restricted Share Plan
RSPO	Roundtable on Sustainable Palm Oil
SASB	Sustainability Accounting Standards Board
SBT	Science Based Targets
SDGs	United Nations Sustainable Development Goals
SHE	Safety, health, environment
SHEQ	Safety, health, environment, quality
SIP	Share Incentive Plan
SMEs	Small and Medium Enterprises
STEM	Science, technology, engineering and mathematics
TCFD	Task Force on Climate-related Financial Disclosure
Te	Tonnes
$TeCO_2e$	Tonnes carbon dioxide equivalent
TRIR	Total Recordable Injury Rate
TSR	Total shareholder return
UV	Ultraviolet
VRF	Value Reporting Foundation
WACC	Weighted Average Cost of Capital
WHO	World Health Organization

Cautionary Statement

The information in this publication is believed to be accurate at the date of its publication and is given in good faith but no representation or warranty as to its completeness or accuracy is made. Suggestions in this publication are merely opinions. Some statements and in particular forward-looking statements, by their nature, involve risks and uncertainties because they relate to events and depend on circumstances that will or may occur in the future and actual results may differ from those expressed in such statements as they depend on a variety of factors outside the control of Croda International Plc. No part of this publication should be treated as an invitation or inducement to invest in the shares of Croda International Plc and should not be relied upon when making investment decisions.

Designed and produced by Black Sun Plc.

This Report is printed on UPM Fine Offset which has been independently certified according to the rules of the Forest Stewardship Council® (FSC®).

Printed in the UK by Pureprint, a CarbonNeutral® company.

Both manufacturing paper mill and the printer are registered to the Environmental Management System ISO 14001:2004 and are Forest Stewardship Council® (FSC) chain-of-custody certified.

FSC
www.fsc.org
MIX
Paper from responsible sources
FSC® C022913

Registered office

Croda International Plc
Cowick Hall
Snaith
Goole
East Yorkshire
DN14 9AA
England

T +44 (0)1405 860551

www.croda.com

CRODA