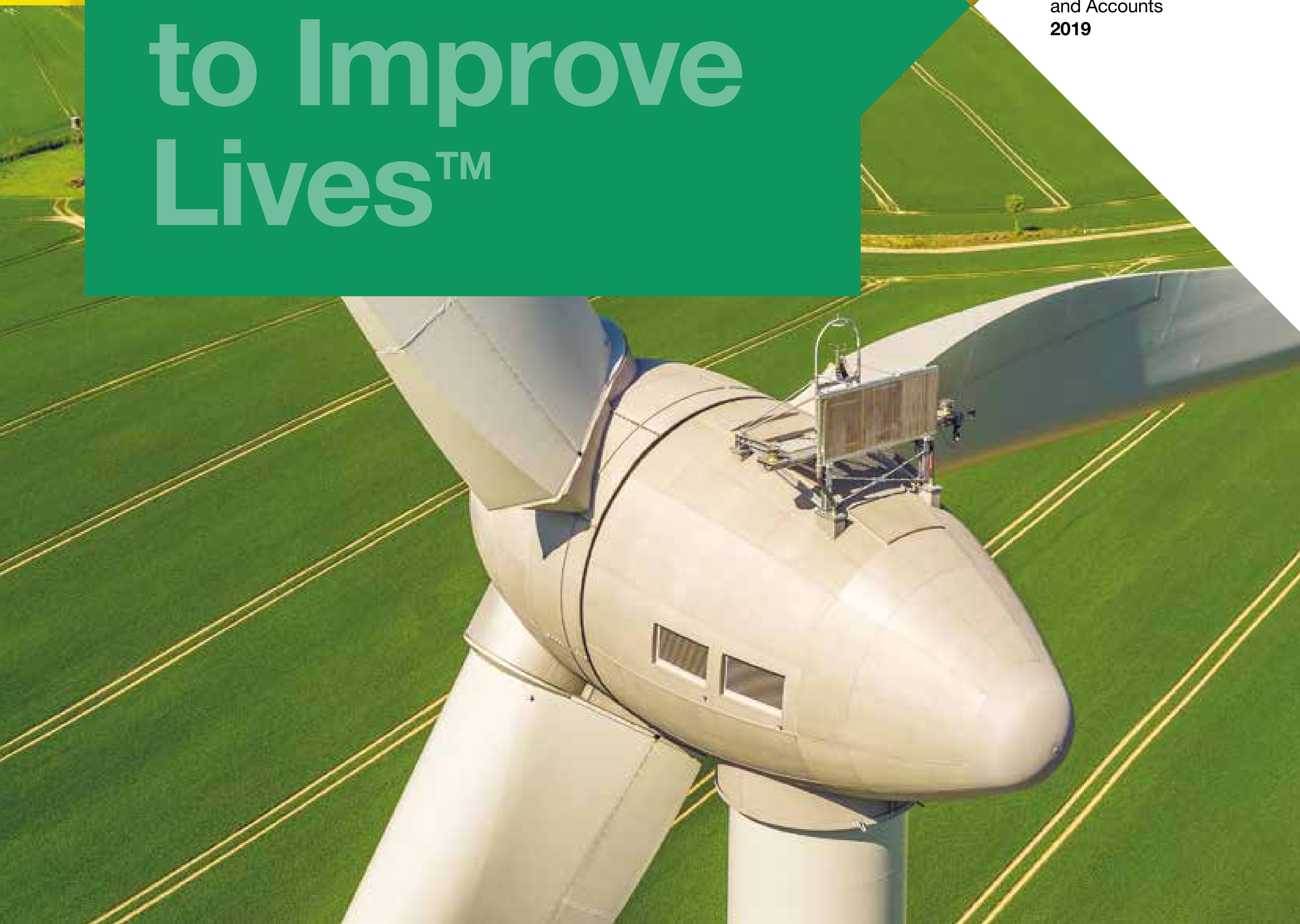
CRODA

Smart Science to Improve Lives™

Annual Report
and Accounts
2019



Smart Science

At Croda, we have made it our Purpose to use our Smart Science to Improve Lives™. We combine our knowledge, passion and entrepreneurial spirit to create, make and sell speciality ingredients that are relied upon by industries and consumers everywhere.

Croda was built upon a foundation of using smart science to turn renewable raw materials into innovative ingredients. This sustainability focus still sits at the core of what we do, driving innovation to create market-leading products and ensuring that we have a positive effect on the environment and society.

Rapeseed flower: over 61% of our organic raw materials are bio-based, including rapeseed oil

to Improve Lives

In line with our Purpose, our ambition is to become the most sustainable supplier of innovative ingredients. Aligning our smart science with the United Nations Sustainable Development Goals (SDGs) will ensure that we help to tackle some of the biggest challenges the world is facing. By 2030 we will be Climate, Land and People Positive.

From sustainable processes and innovative ingredients helping to protect skin, reduce carbon emissions and grow more food, to improving wellbeing and the efficacy of life-saving drugs, we are using our Smart Science to Improve Lives™ every day.

The impact of our smart science at a micro level creates sustainable benefits to improve lives at a macro level

Contents

Sales

£1,377.7m

2018: £1,386.9m

Core business sales growth (constant currency)

-2.3%

2018: +3.8%

IFRS profit before tax (PBT)

£302.3m

2018: £317.8m

Adjusted PBT growth (constant currency)

-3.7%

2018: +6.2%

Ordinary dividend (proposed full year)

+3.4%

2018:+7.4%

NPP % Group sales (constant currency)

28.1%

2018: 28.2%

Energy from non-fossil fuels

22.7%

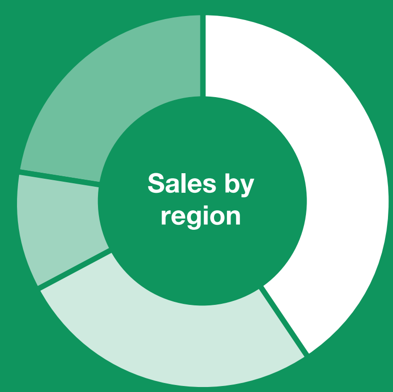
2018: 21.1%

Safety (Total Recordable Injury Rate)

0.55

2018: 0.72

North America operations	Latin America operations	Western Europe operations	EEMEA operations	Asia Pacific operations
10	**9**	**25**	**7**	**23**
Employees	Employees	Employees	Employees	Employees
614	**311**	**2,478**	**105**	**1,072**



Europe, Middle East & Africa	£558.9m
North America	£367.4m
Asia	£143.8m
Latin America	£307.6m

Personal Care	£485.2m
Life Sciences	£350.5m
Performance Technologies	£430.2m
Industrial Chemicals	£111.8m

Personal Care

Smart Science

Advanced personal care science

We are responding to the exacting demands of consumers with our range of speciality sustainable skin care, hair care and solar protection ingredients and working with respected independent scientists

For our customers and our Personal Care team, ingredient integrity and sustainable, cutting-edge science are a priority. We develop and evolve technologies using the 12 Principles of Green Chemistry* to offer sustainable benefits in use and respond to worldwide consumer demand for safe, effective and clean, bio-based products.

Our scientists are a leading force in the development of safe and sustainable inorganic solar protection ingredients. Unlike organics, our mineral ingredients have been classified as GRASE (generally recognised as safe and effective) in a recent proposed rule by the Food and Drug Administration. Perfectly aligned with the 'clean beauty' movement, our range also provides options for reef-safe sun care products. Optimising skin protection is the focus of our work with an independent scientist researching the effects of infra-red light (IR) on skin. This new research is helping us to realise the importance of solar protection beyond UV and to expand our offer to sunscreens with IR as well as pollution protection.

With sustainable production in mind, our hi-tech method of growing plant cells in labs allows us to optimise the production of naturally occurring molecules of interest while we reduce water and land use and help to protect botanical biodiversity. Our waterless formulation prototypes and our bio-degradable and sustainable sugar-based surfactants are industry leaders, helping us to keep improving lives.

* Green Chemistry: Principles and Practices, Dr Paul Anstas

Sea algae: we use this sustainably harvested algae in our ingredients to naturally improve skin hydration

to Improve Lives

Sustainably improving wellbeing

We provide speciality ingredients that care for all types of skin and hair, improving wellbeing while being kinder to our world

There are clear wellbeing and sustainability impacts from our speciality Personal Care ingredients. They provide a positive impact on personal wellbeing while their manufacture involves innovative sustainable production processes with benefits including reduced water consumption.

Our Green Caviar ingredient is a great example of the way our practices align with the SDGs. In the Philippines we support local people through a win-win collaboration to ethically and sustainably source a sea algae which produces a naturally hydrating skin care ingredient.

Many millions of people with every skin type are already protected by our inorganic sun protection ingredients. We continue to investigate ways we can do more to sustainably improve the lives of all living creatures, for example, our vegan-suitable ingredients help customers to meet the demand for non-animal derived and cruelty-free products.

Personal wellbeing is undeniably an important outcome from the use of our ingredients. With this in mind, we are developing a deeper understanding of Emotional Cosmetics to discover the sensory impact of a formulation on wellbeing and any positive psychological effects. This data-driven research will help us to extend the reach of our smart science and prove its impact on the lives of people everywhere, every day.

Smart Science

Sustainable health care and agriculture

Our innovations in a broad range of Crop Care and Health Care speciality ingredients are helping our customers and their consumers to meet their sustainability goals

We are taking important strides in Health Care and Crop Care science, positioned at the smart end of the markets in which we operate, as we deliver niche ingredients to our diverse customer base. We are broadening our range of speciality pharmaceutical excipients, developing and acquiring new technologies, creating a world-leading position in vaccine adjuvants and establishing new drug-delivery platforms. This will include the commercialisation of our partner, SiSaf's, Prosilic technology to optimise drug delivery. We will also work together with our Research and Development team at Enza Biotech, to gather further data demonstrating the performance benefits of our new, biodegradable, sugar-based surfactant technology.

Our contribution to improving global food security begins with a deep understanding of plant science. We are enhancing seed performance and helping plants mitigate the effects of climate variability to improve crop quality and yield. Our sophisticated seed solutions, for example, can even target local markets to improve results in different climatic conditions. Our focus is on sustainable agriculture. We offer drift reduction technologies to target spraying of crops and limit environmental impact, our formulation solutions improve the effectiveness of plant protection products and our advanced biostimulants work with natural plant responses to stresses such as heat and drought to improve both quality and yield.

Sunflower stem. Our ingredients help to sustainably grow more crops and improve health

to Improve Lives

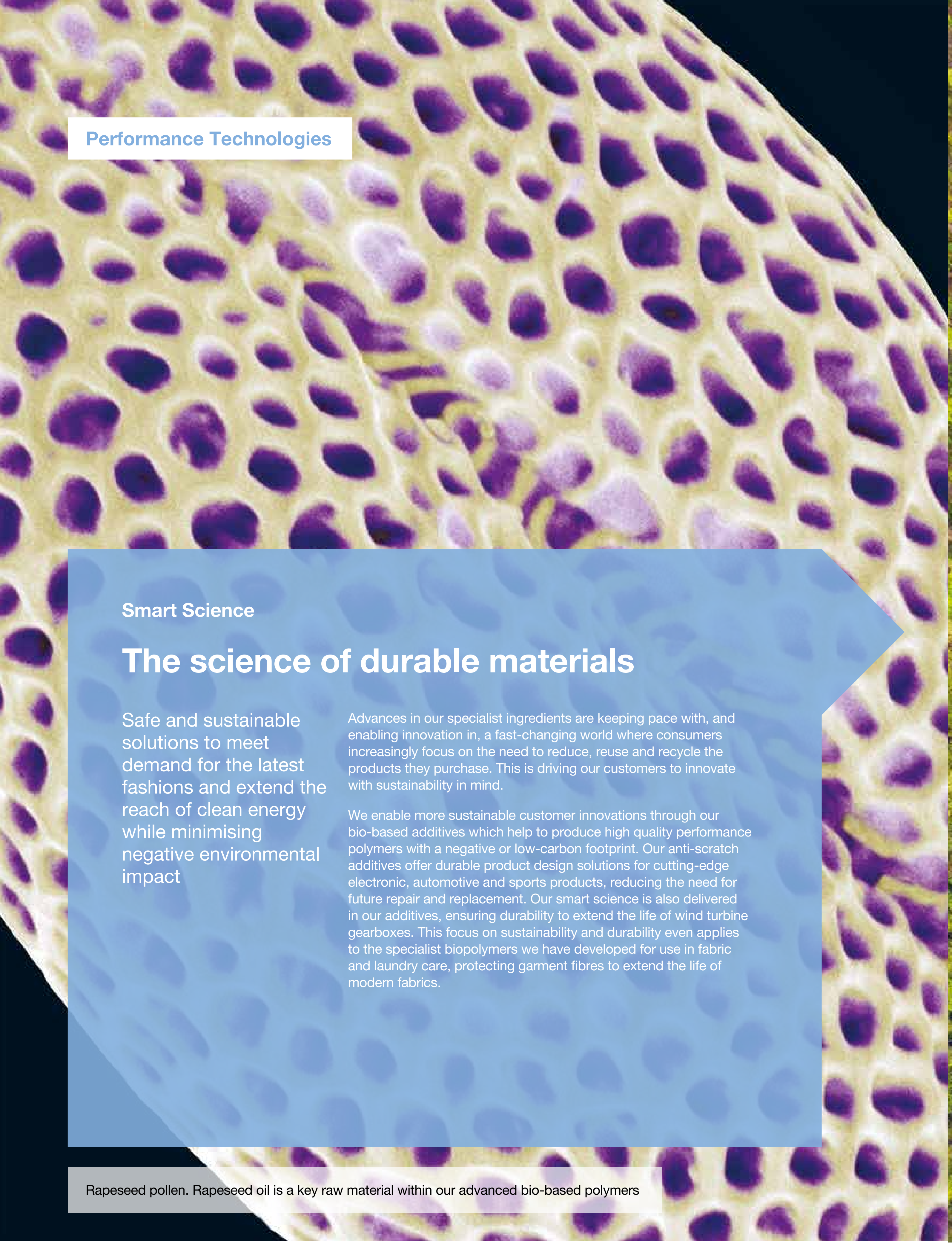
Improving health and food security

We are helping to prevent and cure diseases, feed more people and cut food waste

The positive global impact we have through our Health Care and Crop Care solutions is clear: improved health and more food without the need to use more land. Our Health Care excipients and drug-delivery technologies help to improve the delivery of complex, life-critical drug formulations to ensure maximum effect for patients, while our vaccine adjuvant technologies are being used to combat challenging diseases like HIV and malaria. We partner with our customers to target new diseases and protect people against contagious diseases worldwide.

To help reduce world hunger, our specialist ingredients provide a variety of solutions to help growers, retailers and consumers. Our targeted agricultural delivery technologies and next generation soil health innovations contribute to creating more food today without compromising tomorrow. The seed enhancement technologies we offer effectively and sustainably improve the yield of the world's most important crops. Formulation solutions help to reduce pesticide use and run-off by improving the effectiveness of plant protection products. To further build on our sustainable approach, our biostimulants help farmers to grow more, higher quality crops. This means that they receive better incomes and retailers and consumers can cut the quantity of spoiled fruit and vegetables they throw away. All of this combines to help sustainably reduce world hunger.

Performance Technologies



Rapeseed pollen. Rapeseed oil is a key raw material within our advanced bio-based polymers

Smart Science

The science of durable materials

Safe and sustainable solutions to meet demand for the latest fashions and extend the reach of clean energy while minimising negative environmental impact

Advances in our specialist ingredients are keeping pace with, and enabling innovation in, a fast-changing world where consumers increasingly focus on the need to reduce, reuse and recycle the products they purchase. This is driving our customers to innovate with sustainability in mind.

We enable more sustainable customer innovations through our bio-based additives which help to produce high quality performance polymers with a negative or low-carbon footprint. Our anti-scratch additives offer durable product design solutions for cutting-edge electronic, automotive and sports products, reducing the need for future repair and replacement. Our smart science is also delivered in our additives, ensuring durability to extend the life of wind turbine gearboxes. This focus on sustainability and durability even applies to the specialist biopolymers we have developed for use in fabric and laundry care, protecting garment fibres to extend the life of modern fabrics.

to Improve Lives

Helping to reduce, reuse and recycle

We are supporting the circular economy and durable material design, enabling the growth of clean energy and helping to further reduce negative environmental impact

In our fast-changing world, technology and consumer preferences evolve at pace. Such changes drive the creation of new consumer products, but these can have a short life-span and cause a negative environmental impact if they are difficult to recycle.

Our Performance Technology ingredients help to make materials more durable, longer lasting and efficient, improving the sustainability of our customers' products. Our polymeric materials are key examples of the way we can prolong product life and even reduce defect wastage during production. These align with the global move to a circular plastic economy with our ingredients making production processes more efficient, reducing energy use, increasing the proportion of reusable products and allowing for more recycling.

Our Rewitec™ products improve durability in a market where sustainability is vital. In wind energy applications, where our ingredients extend turbine life and reduce maintenance costs, they deliver significant energy savings and greater carbon benefits. On an individual level, our sustainability focus extends to products helping to reduce the heavy environmental impact of the fashion and textile industry. Our technologies reduce carbon emissions and save water by extending the life of clothing significantly, protecting the fibres of a garment from the fading, greying or pilling that can lead to items being thrown away and replaced, rather than reused or recycled.

Smart Science

Clear and measurable impacts on SDGs

Our sustainability strategy aligns with the SDGs as well as with our new Purpose, Smart Science to Improve Lives™

At Croda we have been building sustainability into our business since we were founded back in 1925. Now, our new purpose-led focus and sustainability strategy aligned with the SDGs, have driven us to define challenging commitments to deliver even more sustainable ingredients. We have designed these commitments with Science-Based Targets in mind, to stretch us all to work together for the benefit of our climate, the land and our people.

Our new Commitment will help us deliver our ambition to be the most sustainable supplier of innovative speciality ingredients, leading the way globally. We will be making real changes and, with the agreement and active support of our worldwide team, we will become Climate, Land and People Positive by 2030.

Our Commitment includes an ambition to significantly reduce our water use

to Improve Lives

Playing our part in fighting climate change

We are proud of our Commitment to becoming Climate, Land and People Positive as it will have an impact on lives worldwide

The link between climate change and human industrial activity is now well understood and is increasingly visible in our lives and in news reports every day. From more frequent local extreme weather events to increasing global temperatures and melting ice caps, greenhouse gases including carbon dioxide (CO_2) are widely accepted as key drivers of these climate changes.

The use of our bio-based ingredients is already saving CO_2 emissions and helping to fight climate change, but we can do more. We can help our customers to play their part in reducing the amount of CO_2 in the atmosphere. Combining this with a drive to ensure our own production processes are as sustainable as possible can make a real difference in helping to reduce negative climate impacts.

Our speciality ingredients are helping our customers to improve food security, reducing world hunger while cutting costly food waste. Our smart science ingredients within vaccines, sun care and skin care are already targeting devastating diseases, protecting and improving the lives of adults and children worldwide. From reducing carbon and growing more food, to increasing the profile of Science, Technology, Engineering and Maths (STEM) in schools and improving the gender balance at work, we are committed to doing the right thing.

Find out more in our 2019 Sustainability Report.

Delivering returns for our stakeholders

"A year that proved the robustness of our strategy and business model, the talent of our people and the importance of our Purpose."

Anita Frew
Chair

Overview

In this my fifth year as Chair introducing a Croda Annual Report, I can report that we have delivered a resilient performance despite the most subdued market conditions that our industry has seen for a decade. This was a year that proved the robustness of our strategy and business model, the talent of our people and the importance of our Purpose, Smart Science to Improve Lives™.

I am pleased with our performance in four key areas. We saw no reduction in our industry-leading profit margin, we delivered stronger cash generation, we maintained a healthy innovation pipeline and we invested in new capacity to drive future growth, most notably bringing the North American biosurfactant plant into operation for 2020. We also returned £266.9m to our shareholders, combining growth in ordinary dividend with a special return of excess capital. Although we experienced lower sales, we responded well, continuing to invest in future opportunities whilst keeping our cost base lean and fit for the future.

A strategy to stand the test of difficult markets

Sales and profit were slightly lower than 2018, reflecting difficult market conditions in Personal Care and Performance Technologies. Core Business sales declined by 0.2% in reported currency to £1,265.9m (2018: £1,268.7m) and by 2.3% in constant currency. We broadly protected profit, with Group adjusted operating profit 0.8% lower in reported currency at £339.7m (2018: £342.5m), 1.8% lower in constant currency. Profit before tax on an IFRS basis decreased by 4.9% to £302.3m (2018: £317.8m), reflecting higher interest costs and an exceptional charge for our programme to reduce costs.

Personal Care, our largest business, experienced slower demand as trade headwinds impacted two of its biggest markets, in North America and North Asia, but nevertheless maintained its profit and innovation pipeline. Encouragingly, it experienced a return to sales growth in the fourth quarter.

I am optimistic for continued growth in our high value Beauty Actives and Beauty Effects businesses, increased differentiation in Beauty Formulation and the opportunities offered through our deep understanding of our customers' sustainability needs.

In Life Sciences, the rate of development of new, more complex drugs and sustainable agricultural products is creating exciting opportunities for Croda. 2019 saw record sales accompanied by an improved margin. Growth in speciality excipient delivery systems for Health Care and in differentiated adjuvants in Crop Protection provide an excellent platform on which to build further and match the scale and profitability of our Personal Care business in due course.

Industrial markets globally saw a marked slow down and Performance Technologies experienced a disappointing fall in sales and profitability. This was a reflection of poor automotive demand and general economic uncertainty across broader industrial markets in Europe and North America but, despite this short-term weakness, the fundamentals for this sector remain attractive.

A new Purpose – taking our commitment to sustainability further

After over 10 years leading our industry in sustainability reporting, the Board has developed, in conjunction with our Executive and our employees, an ambition for the next 10 years, through to 2030. We have rolled out our new Purpose, Smart Science to Improve Lives™. Our ambition is to become the most sustainable supplier of innovative ingredients. Working with the Cambridge Institute for Sustainability Leadership, we have developed a plan to harness our smart science, our people and entrepreneurial culture to provide solutions that better benefit our customers and meaningfully impact the wider world through the United Nations Sustainable Development Goals (SDGs). We have committed that, by 2030, we will be Climate, Land and People Positive, so that we have a net positive benefit to the planet. We are excited about this ambition because, not only is it the right thing to do, it is fully aligned with delivering superior performance for stakeholders through Croda's innovative and increasingly sustainable ingredients.

Aligning sector strategies with our Purpose

We will only be able to deliver our stretching commitments and Purpose if we have clearly aligned strategies for our sectors. During 2019, the Board and Executive Committee reviewed these sector objectives. As well as a strong alignment with the megatrends which influence our markets and drive our growth, each of our sectors has a strategy with a line of sight to our shared Purpose and the SDGs.

In Personal Care our focus is to 'Strengthen to grow', scaling the business to respond to a market driven by an ageing population, increasing disposable incomes and, of course, a keen eye for sustainable products. Our Life Sciences strategy is to 'Expand to grow', enhancing our existing market-leading products and looking to acquire adjacent businesses and technologies, to deliver improved health and food security. Performance Technologies will 'Refine to grow', focusing its existing product portfolio on fast growth markets and developing a broader geographic footprint.

Governance to underpin our Purpose and sustainability Commitment

The Croda culture and our Purpose are all about doing the right thing. This is built on a foundation of strong, transparent governance, delivered to the highest standards. Through its programme of individual and group visits and meetings, the Board met with a number of our key stakeholders during the year, including shareholders, customers and colleagues, in line with good corporate governance see p54.

Our 2019 safety performance was particularly pleasing, with a continued improvement in process safety indicators and delivery of our personal injury target one year early. This is testament to the relentless focus we have on the safety of our colleagues, their vigilance and care for each other. We are also making progress in diversity across the business; gender balance is included in our new sustainability targets and, with over one third of our Board already female, we are cascading our commitment to other management and employee levels.

The Board continues to develop and, at the 2020 AGM, we will say farewell and thank you to Alan Ferguson, who retires after nine years of consistently wise and constructive contribution. In his place we have welcomed John Ramsay, who joins us with an impressive depth of experience in international finance and the life sciences market. Following the AGM, John will take on the role of Chair of the Audit Committee and Helena Ganczakowski will become Senior Independent Director.

Evolving the team

Our people, as always, have delivered outstanding work and commitment this year. When I meet these colleagues, I am always impressed by their insight and 'can do' attitude. I am proud to work alongside them and want to share my and the Board's thanks for all that they do. 2019 was a challenging year for markets and we took action to keep our cost base lean, to ensure that Croda stays in a position of strength and can keep responding to changing markets through our relentless innovation. These savings will support performance if markets remain subdued and allow us to invest in new opportunities, including in Asian growth markets, Personal Care and Life Sciences.

Case study:

Advancing immunoregulating vaccine technology

Our acquisition of Biosector took us into the high value and fast growing vaccine adjuvant market for the first time. A leading specialist in this field, our adjuvant technologies are advancing the efficacy and impact of a pipeline of vaccines targeting diseases in both well known vaccines, such as conjugate pneumococcal vaccines, and new developments in difficult areas, like AIDS, malaria, hepatitis B and tuberculosis. Our adjuvant pipeline supports vaccines in diseases highlighted by the World Health Organisation (WHO) as key to achievement of SDG 3: Good Health and Wellbeing.

Vaccine adjuvants have developed rapidly in recent years to become an even more critical part of vaccines, as ever more complex active ingredients are developed. Our adjuvants feature innovative immunoregulating properties, moving the industry forward and enabling more complex and effective vaccines. This is an exciting area of future growth for us in a new adjacency for our Health Care business.

Dividend

We have a prudent capital allocation policy, supported by strong cash generation and low debt. This allows us to invest in projects to deliver growth, with over £100m spent in capital expenditure in 2019, as well as pay a regular and increasing ordinary dividend, covered at least two times by adjusted earnings. The Board has recommended an increase in the full year declared ordinary dividend of 3.4% to 90 pence per share (2018: 87p).

Future

The resilience of our strategy and business model has stood the test of time, tough markets and a changing world. As we look forward, this foundation, a wealth of innovative ideas which can improve lives for us all, and our focus on Purpose give us confidence.

Anita Frew

Anita Frew
Chair

Business Model

Creating value with Purpose

We generate long-term value by engaging with customers, creating, making and selling sustainable and innovative speciality ingredients in line with our Purpose. We use Smart Science to Improve Lives™.

Smart Science to Improve Lives™

Our value chain

Consumer demand
Changing demographics, our fragile planet and innovations in digital technologies continually influence consumer demands.

Customer needs
Our customers seek innovative and sustainable ingredients that meet consumer demands.

Our sustainable business model

Engage (E)
Working closely with our customers and supply chain, we identify consumer needs around the world.

Create (C)
We create sustainable and innovative ingredients that meet consumer needs.

Make (M)
Our manufacturing sites all run flexible operations to consistently high standards and our suppliers share our ethical approach.

Sell (S)
We have a direct selling model with sales, technical and warehousing local to our customers.

Customer product
Customers use our innovative and sustainable ingredients to enhance their products to meet their consumers' needs.

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

	What makes us different	Tangible value	Intangible value
ALL	**Purpose-led culture and our people**	• Deliver against our shared Purpose together • Attract and retain talent	• Exciting and inclusive place to work • Engaged and innovative teams with a shared Purpose
ALL	**Ambitious commitment to be Climate, Land and People Positive by 2030**	• Can respond to increasing customer demand across sectors for sustainably created ingredients providing sustainable benefits in use	• Ambitious Commitment helps to focus team and individual efforts • Prioritising sustainability with our Purpose supports our values and culture
E	**Extensive Open Innovation and Smart Partnering**	• Building our stream of sustainable, innovative new products	• Collaborative relationships can accelerate and enhance product development. We gain new insight
C	**Valuable protected intellectual property know-how and innovation pipeline**	• Our new and protected products grow valuable revenue streams	• Recognition as industry leader
C	**Exceptional product performance, claims validation and quality testing**	• Reliable, high quality and high value ingredients	• Build and maintain customer trust and loyalty
C	**Best in class regulatory insight and support**	• Identification of regulatory issues and opportunities during product development	• Build and maintain customer trust and loyalty • Create two-way dialogue with regulators
M	**Selective acquisitions and capital investments, guided by our Purpose**	• Our Purpose helps us to identify the right expertise and technologies to acquire to drive our strategic growth • Excellence in manufacturing and engineering practice	• Clear Purpose helps newly acquired teams integrate effectively
M	**Supply chain transparency and traceability**	• Reassurance that our supply chain is as ethical, responsible and sustainable as possible	• Build and maintain customer trust and loyalty
S	**Intimate customer relationships**	• Consumer insight helps to improve product innovation and positioning	• Customer loyalty supporting growth in core and emerging markets
S	**Agile local sales and R&D teams**	• High service levels locally to develop and deliver for our customers every time	• Local market insight and ability to respond quickly to changing customer needs

Our Stakeholders

Our Purpose and business model succeed on the strength of our stakeholder relationships. We prioritise engagement with these individuals and groups, striving to understand their key considerations and goals so that we can achieve these together.

Engaging with our stakeholders every day

Stakeholder		Key considerations	Why we engage	How we engage
Shareholders	**64%** proportion of share capital held by the 347 investors we met in 2019	• Quality and effectiveness of governance • Growth potential and profitability • Share price appreciation • Dividends • Sustainability of ingredient creation and benefits in use	• Open and regular dialogue is critical to ensure that our strategy is understood • We allow assessment of our Environmental, Social and Governance Performance (ESG)	• We attend investor events worldwide and invite groups of shareholders to visit us • We keep shareholders up to date via our website, press activities, Annual Reports and Annual General Meetings (AGM) • All Directors attend AGMs • We conduct one-to-one meetings with investors
Our People	**3,500** responses to Purpose Pulse Surveys Oct – Dec 2019	• Our Smart Science to Improve Lives™ Purpose directs and engages the knowhow, creativity and entrepreneurial spirit of our people • First class new and existing talent is attracted and retained by organisations that share insight, develop skills, collaborate and innovate within a truly inclusive culture	• We need the best teams to be engaged and to collaborate every day if we are to achieve our Purpose together	• We run informal networks, local newsletters, cascade meetings, works councils and consultation committees • We issue global email news notifications, intranet news and a regular global newsletter as well as webinars, culture surveys, Pulse Surveys, town halls and listening groups • We use the Yammer internal social network to share insight • We give employees the opportunity to become Croda shareholders
Customers	**25,000** face-to-face meetings with our customers in 2019	• There are exacting and changing demands from our diverse consumer base • For our customers, innovative ingredients, created sustainably and with sustainable benefits in use are a priority if they are to meet their own SDG commitments	• By sharing market insight with customers, we identify future opportunities together • Our insight helps to inform R&D, provide sustainable solutions and improve product performance	• Our market sectors have research, sales and marketing teams working closely with our customers' R&D, purchasing, regulatory and sustainability departments • We have face-to-face meetings, attend industry events, speak at conferences and invite customers to our seminars, workshops and application laboratories
Suppliers	**1 of 125** companies globally to join the CDP Supply Chain, engaging with suppliers on environmental issues	• Supply chains in our industry can be long and complex. We need to secure our materials at the right time and price • Complexity increases the risk of association with companies that do not share our ethics and values	• Supply chain integrity is critical to deliver a sustainable business • We must source from suppliers who share our standards of ethics, values, transparency, quality and reliability	• We are trusted industry leaders on traceability and sustainability; in part this is due to our characterisation of key physical supply chains • We have strong global, regional and local partnerships with suppliers • We work with our suppliers through initiatives such as CDP (formerly Carbon Disclosure Project), Sedex and EcoVadis, and oversee compliance through our Group Ethics Committee
Local Communities	**5,883** hours of 1% Club time recorded in 2019, with 31% of this used for STEM activities	• Communities rightly expect local employers to operate safely, effectively and sustainably and to give back to society	• Strong local relationships help us to maintain trust and our social licence to operate • Our education activities support local schools, give our people new skills, help us recruit new talent in the future and create a positive societal impact	• We invite local people to join our site committees • We maintain open dialogue with Government officials and emergency services • We support education programmes to raise the profile of Science, Technology, Engineering and Maths (STEM) • Our 1% Club volunteers give 1% of their employed time to support local community needs
Innovation Partners	**500** Open Innovation partner collaborations since 2010	• Potential and existing Open Innovation partners seek opportunities to collaborate with companies leading advances in speciality ingredients, to benefit from shared insight and find new ways to develop ingredients that improve lives together	• A collaborative approach to innovation can accelerate time to market, reduce costs and differentiate products • Universities and SMEs give us access to extended R&D capability and public funding to enhance our product development	• We seek Open Innovation and Smart Partnering opportunities with our customers, academics, university start-ups and technology providers • We encourage partners worldwide to approach us with innovations
Regulators & Trade Associations	**220** active memberships of industry associations	• Regulatory complexity is a necessary part of our industry • Consumers and policy makers have an increasing influence on regulators and trade associations regarding issues such as climate change and microplastics	• We are committed to transparency, trust and meeting the needs of our customers and consumers • Keeping informed, leading and supporting legislative and regulatory change help us to direct, anticipate and prepare for changes that will impact our business	• Our people chair and are members of national and international industry associations, where our voice is highly respected • We attend meetings with local Government officials and emergency services to support community needs
Non-Governmental Organisations (NGOs)	**99%** of our manufacturing sites who use palm oil are RSPO certified	• The consumer voice is powerful • NGOs representing consumers are rightly pressurising businesses to take responsibility for their impacts • Our customers receive the majority of NGO interest, but we have a responsibility to support them	• Engagement on the ingredients we make and how we make them is increasingly important • Understanding the NGO perspective helps us to achieve our Purpose and protect our reputation	• We regularly collaborate with NGOs and work with our customers, trade associations and regulators • Since 2009 we have been a lead voice in driving industry transformation to certified sustainable palm oil (RSPO) • A founder member of Action for Sustainable Derivatives, we have encouraged wider membership to harmonise requirements on transparency and risk monitoring as part of our commitment to deforestation-free and responsible sourcing (see our 2019 Sustainability Report)

Section 172 statement

Section 172 of the Companies Act 2006 requires the Directors to take into consideration the interests of the stakeholders in their decision making. The Directors have regard to the interests of the Company's employees and other stakeholders, including its impact on the community, the environment and its reputation, when making their decisions. The Directors consider what is likely to promote the success of the Company for its members in the long term in all their decision making.

This statement should be read in conjunction with the Corporate governance report on pages 44 to 70 and the stakeholder section above.

Delivering the Croda difference

"The strength of the Croda business model was demonstrated in subdued market conditions in 2019."

Steve Foots
Group Chief Executive

Strong business model delivers resilient performance

The strength of the Croda business model was demonstrated in subdued market conditions in 2019. Our robust profit margin was maintained, with return on sales unchanged at 24.7%. We delivered strong cash conversion, with free cash flow up by over 30%. Our relentless focus on innovation continues to differentiate Croda and, as we enter 2020, our innovation pipeline remains healthy. This will be reinforced by new capacity coming on stream to support organic growth, notably the biosurfactant plant in North America which is now operational. Our recent technology acquisitions made good progress during the year and offer exciting future opportunities through their sustainable platforms.

Subdued market conditions in Personal Care and Performance Technologies

Group sales and profit were slightly lower, reflecting difficult market conditions in Personal Care and Performance Technologies. Core Business sales declined by 0.2% in reported currency to £1,265.9m (2018: £1,268.7m) and by 2.3% in constant currency. We broadly protected profit, with Group adjusted operating profit 0.8% lower in reported currency at £339.7m (2018: £342.5m), 1.8% lower in constant currency. This limited impact on profit reflects the strength of the Croda model, which delivered a richer quality of sales, with Core Business price/mix three percentage points better, and lower operating costs, which together offset much of the impact of lower volumes in Personal Care and Performance Technologies. We continued to invest in additional sales and innovation resource to target future growth, in line with our strategy and Purpose.

We have a strong business model in Personal Care. Despite weaker sales in the first nine months of the year, as trade headwinds impacted its two largest markets of North America and North Asia and customers destocked, the sector delivered margin growth and maintained adjusted operating profit. In line with our expectations, the fourth quarter saw a return to modest sales growth as headwinds reduced and key markets in North America and North Asia saw some recovery.

Life Sciences delivered a record sales performance, driven by the strength of the Health Care and Crop Protection platforms. Sector sales rose by almost 6% in constant currency, supported by new opportunities in speciality excipients, and margin expanded, delivering record profitability.

In contrast, after several years of strong profit growth, Performance Technologies delivered a disappointing performance amid economic uncertainty and weak demand, as lower sales volume impacted margin, reducing profitability.

As we exited the year, a somewhat improved outlook for the consumer business contrasted with challenges in industrial markets. We continue to invest in growth opportunities whilst keeping our existing cost base lean and fit for the future. We are reinvesting the benefits of cost savings in over 100 new roles to drive future growth, increasing our presence in China, expanding our digital programme, and investing in more sales and innovation resource in Personal Care and Life Sciences. These actions will protect Croda and help us grow.

The Strategic Report was approved by the Board on 24 February 2020 and signed on its behalf by Steve Foots.

Steve Foots
Group Chief Executive

Strong cash generation supporting dividend and investment

Cash generation increased in 2019, with free cash flow of £201.7m (2018: £154.9m), benefitting from better working capital management. We continued to invest in projects to deliver future growth, including finalisation of the North America biosurfactants plant, as well as doubling capacity of our US speciality excipients plant for Life Sciences, due on stream later in 2020, growing our industry-leading Beauty Actives platform in Personal Care and shifting Performance Technologies towards higher technology markets and products. We have a clear approach to capital allocation and paid £266.9m (2018: £110.5m) in dividends to shareholders, including a special return of excess capital in May 2019. We have proposed an increase in the full year ordinary dividend declared to 90.0p (2018: 87.0p) on adjusted basic earnings per share (EPS) of 185.0p (2018: 190.2p).

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

IFRS reported profit lower including increased exceptional charge

Group sales decreased by 0.7% to £1,377.7m (2018: £1,386.9m). Profit before tax on an IFRS basis decreased by 4.9% to £302.3m (2018: £317.8m). This reflected lower sales and a higher interest charge, including the impact of increased debt from the special dividend and acquisition of Biosector, together with a higher exceptional charge of £10.7m (2018: £4.9m), which in 2019 reflected the delivery of cost savings actions.

Sector performance led by record year in Life Sciences

The standout performance in 2019 was in Life Sciences, with record sales accompanied by an improved margin. Sales grew by 5.9% and adjusted operating profit increased 11.6% both in constant currency. With return on sales at 30.6% (2018: 29.5%), this demonstrates the opportunity for Life Sciences to achieve similar returns and at a similar scale to Personal Care. After excellent first half sales growth, demand in the second half year was weaker, partly due to slower demand in Seed Enhancement, but margins continued to expand. We expect to deliver mid to high single digit percentage sales growth across the medium term, driven by our leading technology positions in speciality health care excipients and crop protection delivery systems.

Personal Care demand slowed, against a strong comparator in 2018, as trade headwinds impacted the US and North Asia markets, with sales 3.0% lower in constant currency. US consumer spending in the Personal Care and Beauty category was broadly flat on the prior year and we saw a marked reduction in customer inventories around the middle of the year which adversely impacted our sales. In North Asia, restrictions on Daigou sales into China hit sales to our customers in Japan and Korea, whilst local Chinese customers were under pressure from trade uncertainties and new legislation. Encouragingly, the fourth quarter saw Personal Care sales in North Asia and North America return to modest growth, with local demand in China recovering well and sales to Japan/Korea back into positive territory. The strength of the Personal Care model was demonstrated through an improvement in return on sales to 33.4%.

After three successive years of double digit percentage profit growth, 2019 marked a disappointing year for Performance Technologies amid sustained economic uncertainty and weak demand. Poor global automotive sales in the first half were followed by a general slowing in broader industrial markets in Europe and North America in the second half year. Sales were 7.3% lower in constant currency and return on sales reduced to 16.1%. Despite this shorter term weakness, the fundamentals for Performance Technologies remain attractive, with a progressive shift in the business towards renewable technologies, greater innovation and providing sustainable solutions.

Case study:

Cambridge Institute for Sustainability Leadership

The corporate purpose and sustainability commitment we share in this report really began to take shape in 2018 when we started a project with the Cambridge Institute for Sustainability Leadership (CISL). This Institute draws on world-leading research and networks to work with business leaders, helping to address critical global challenges. CISL challenged us to articulate our corporate purpose and our commitment to sustainability, aligning these with the SDGs upon which we could have the greatest impact. They guided us towards good practice and helped 'stress test' our 2030 ambition that is now embedded in our Climate, Land and People Positive Commitment (see page 29 in this report).

SUSTAINABLE DEVELOPMENT GOALS

Regional performance weaker across all regions

The weakness in sales was reflected across all regions. In Europe sales were 2% lower in constant currency as good Personal Care demand was more than offset by weak industrial markets. Market conditions in North America were noticeably tougher through the first nine months, with full year constant currency sales down 6%, reflecting the US/China trade dispute and lower automotive and consumer product demand. Asia was also unusually weak, with constant currency sales 1% lower than prior year, reflecting uncertainties over macroeconomic growth and changes to selling legislation in China. Latin America constant currency sales were down 2%, with strong crop demand offset by weak Personal Care sales. In the fourth quarter, although European markets slowed, both North America and Asia saw an encouraging return to growth, both up 3% in constant currency on 2018, driven by better consumer demand.

Smart Science to Improve Lives™ – our Purpose and ambitious sustainability commitment

At Croda, we have made it our Purpose to use our Smart Science to Improve Lives™. Croda was built upon a foundation of using smart science to turn renewable raw materials into innovative ingredients to give sustainable benefits in use. This focus still sits at the core of Croda, driving innovation and sustainability to create market-leading products and ensure that we have a positive effect on the environment and society. In line with this Purpose, our ambition is to become the most sustainable supplier of innovative ingredients. By aligning our smart science with the United Nations Sustainable Development Goals (SDGs), we will ensure that we are helping to tackle some of the biggest challenges the world is facing. We commit that by 2030 we will be Climate, Land and People Positive; in other words, the impact that Croda has in these three key areas of sustainability will be net positive for the planet.

In becoming Climate Positive, we will support the transition to a low carbon economy. We will work closely with our customers, developing ingredients that deliver carbon savings in use. By 2030, we will make significant progress towards net zero carbon emissions associated with our activities, we will further increase the bio content of our raw materials and the use of our ingredients will save significantly more carbon emissions than required in their manufacture. In becoming Land Positive, we will save more land than we use. We will increase agricultural land use efficiency, protect biodiversity and support food supply by sourcing sustainably and inspiring innovation in our crop business. By 2030, the land area saved through improved yields and crop resilience of our agricultural ingredients and technologies will exceed that used to grow all our raw materials.

In becoming People Positive, we will promote healthy lives and wellbeing through the development and application of our ingredients and technologies. By 2030, we will have used our smart science to improve millions of extra lives.

We are launching a full range of these sustainability ambitions and 2030 targets. We believe that Croda is strongly positioned to deliver both superior financial performance and help to create a sustainable planet.

Protecting our people and the communities in which we operate is critical to Croda. In 2019 our process safety performance continued to improve, with no serious incidents or any with major accident potential, achieving an almost threefold reduction in incidents. Our personal injury performance was another success story. For the first time in our history, we achieved two consecutive months free of any recordable injuries and we met our target of achieving a Total Recordable Injury Rate (TRIR) of 0.6 a year ahead of schedule. We were also pleased to be recognised as Company of the Year by the UK Chemical Industry Association and as one of Britain's Most Admired Companies and the most admired British chemical company by Management Today, for the third year running. We were voted Best Product Innovation in the Global ICIS Innovation Awards for a novel patented polymer molecule which serves as a building block for the development of more stable and effective products.

Strategy delivery

Building on our Purpose, the Board reviewed our strategy through to 2030. We have expanded our long term view, sharpened our sector priorities and increased our focus on higher growth geographies. Our strategy is to deliver:

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

Our ability to connect to faster growth markets through faster growth technologies, faster growth geographies and faster growth market niches will enable us to deliver this strategy.

We are fully aligned with the megatrends which shape our markets and which will drive growth. Life Sciences delivers better health and well being, through its focus on disease prevention and cure, and improved crop yields, through better delivery systems to feed a growing population from the same land with less environmental impact. Personal Care is meeting the expectations of consumers with growing incomes seeking clean and natural beauty, whilst protecting the health of consumers through more effective solar protection. Performance Technologies is focusing on renewable technologies, delivering affordable and clean energy, and helping customers meet their climate action goals.

Our sector strategic priorities are to:

- **Strengthen to grow in Personal Care.** As the leading innovator in a market driven by an ageing population, rising disposable incomes and a demand for sustainable products, Personal Care will continue to scale its industry-leading Beauty Actives business, broaden the product portfolio in Beauty Effects and continue to reinvent the Beauty Formulation category. This should deliver good top line growth and maintain the current excellent margin over the medium term;
- **Expand to grow in Life Sciences.** With its growing margin and exciting technologies aligned to global health and food sustainability trends, we will continue to build our Life Sciences brand as a high value add solution provider to our pharmaceutical and crop customers, enhance our product range and look to acquire adjacent businesses and technologies. This should grow the top line and increase the current margin over the medium term; and
- **Refine to grow in Performance Technologies.** Able to meet demands for sustainable solutions in advanced technologies, Performance Technologies will continue to refine its existing product portfolio, focus on fast growth markets and develop its geographic footprint. This should deliver modest sales growth at an improved margin over the medium term.

In 2019, despite the challenging markets, we made progress in delivering this strategy. Group NPP was broadly unchanged at 28.1% (2018: 28.2%) of total sales on a constant currency basis and we continued to invest to accelerate innovation in the future. We have 35 customer innovation centres, acquiring a new application lab in Rewitec with upgraded centres planned in Shanghai and the US in 2020. These facilities enable us to work more closely with both global and local customers. This was supplemented by more than 100 active research projects with our network of over 500 Open Innovation partners, in universities and SMEs, with over a quarter of projects directly linked to delivering our sustainability objectives. In addition, our recent technology acquisitions and investments are delivering product development opportunities which could generate meaningful sales over the next five to ten years. Enza is developing novel patented chemistries to enhance existing products and is utilising Croda's investment in high throughput screening at the Materials Innovation Factory at the University of Liverpool. Nautilus is using its library of marine organisms to develop sustainable applications in haircare and crop applications. Encapsulation technology from SiSaf is showing promise in Personal Care and Life Sciences and Cutitronics is developing a prototype skin assessment and delivery device. Plant Impact has been restructured, to focus on generating data packages for its innovative range of biostimulants, which should lead to new sales by 2021.

Recent acquisitions are demonstrating exciting growth opportunities in new niche markets, driven by sustainability needs. IRB by Sederma continues to grow, using plant stem cells to deliver sustainable beauty active ingredients. IonPhasE is extending its range of electrostatic dissipative polymers and its geographic sales footprint through the Croda salesforce, and delivered its first profit in 2019. Rewitec was acquired during the year, creating a new range of lubricant additives to extend the life of wind turbines. Biosector, a leader in vaccine adjuvancy, was integrated into Croda's in-house sales network, replacing former distributors with direct access to more customers. We expect increasing demand for both human and animal vaccines to drive future growth.

We are pleased by the recommissioning of the North American biosurfactant plant, which became fully operational at the start of 2020, following a leak in late 2018 which caused the operation of the plant to be extensively reviewed to ensure safe operation. We have begun replacing traditional petrochemical surfactants with our ECO range of bio-based products offering identical performance from sustainable ingredients for the first time, particularly for personal and home care applications. 2020 should see additional margin captured, with volume growth following as customers launch new and replacement bio-based products.

Further capacity expansion is following from 2020 for speciality excipients, new polymer additive products and botanical ingredients.

We are continuing to invest in our digital programme, focused on digital solutions across our Engage, Create, Make and Sell business model. In Engage, we are developing a knowledge platform to store and share IP across our R&D teams. In Create, we are using in-silico modelling to develop new products and artificial intelligence (AI) to help seed customers screen out unhealthy seeds. In Make, we are improving global supply chain management to deliver better customer service and lower inventories, while introducing new tools to enhance manufacturing efficiency. In Sell, we are driving more traffic to our websites, with more literature downloads, samples supplied and new customers engaged via 'live chat'.

Whilst we focus on driving competitive advantage through our relentless innovation machine and unique customer intimacy, we are also managing our costs. Delivering cost savings helps offset cost inflation whilst demand remains weak and funds reinvestment in growth opportunities. These include additional resources for sales and innovation in Asia growth markets and in Health Care. We continue to invest to deliver exciting sales and profit opportunities across our business, aligned with our Purpose of using Smart Science to Improve Lives™.

Covid-19

As the Covid-19 virus has developed over recent weeks, we have been assessing the impact on our employees and our business to ensure that both are effectively supported and managed. At this time, to the best of our knowledge, no Croda employees have been infected by the virus. Our sales offices have reopened, as have our two production units, albeit with more limited operations than usual. China represents 6% of Croda's Core Business sales, 2% of Group production and a limited component of our raw material supply chain. However, there is potential for some disruption to customer and consumer demand. We will continue to monitor the impact.

Outlook

In 2019, we delivered a resilient performance with a strong margin maintained and increased cash flow, despite subdued market conditions. This is testament to Croda's focused strategy and strong business model.

In the year ahead, subject to trading conditions remaining similar, we expect to make further progress in our consumer markets, whilst demand in industrial markets is expected to remain weak but stable. Growth will be second half weighted.

With our new Purpose, Smart Science to Improve Lives™, we will continue to increase the positive impact our products deliver for our customers and their consumers. We will also reduce the negative impact our activities have on our fragile world. The combination of a healthy innovation pipeline, recent investments, cost saving benefits and a robust business model is expected to underpin performance.

Steve Foots
Group Chief Executive

Our Strategy

Focused on Purpose and innovation

Strategic Report

Our corporate strategy and our sector priorities are clearly linked to our Smart Science to Improve Lives™ Purpose. We use this approach to work with our customers to help them deliver their consumer and sustainability commitments, while we achieve our own objectives and create value for our shareholders.

Group strategic objective	We achieve this through	What we have done in 2019	Our priorities in 2020	KPIs See page 32	Risks See page 38
Growth **Consistent top and bottom line growth, with profit growing ahead of sales, ahead of volume**	• Our unrivalled local direct selling capability • A balanced global footprint • Accelerating sales in our core markets • A disciplined approach to capital allocation • Investing in high return opportunities	• Despite subdued market conditions, we delivered a resilient performance with a robust profit margin • Delivered cost savings to enhance efficiency and reinvested in new roles to drive future growth • Delivered strong cash conversion • Returned capital to shareholders • Continued to invest in projects to deliver future growth including the biosurfactant plant and speciality excipients plants in North America	• Strengthen to grow Personal Care • Expand to grow Life Sciences • Refine to grow Performance Technologies • Further capacity expansion for speciality excipients, new polymer additive products and botanical ingredients	• Return on sales • Core Business sales growth	• Revenue generation in established and emerging markets • Talent development and retention
Innovation **The lifeblood of our business, we seek to increase the proportion of NPP that we sell**	• Investing in our own R&D • Expanding the number of regional innovation centres • Working closely with customers to better understand their specific needs • Identifying disruptive technologies • Working with external, Open Innovation partners and universities	• Innovation pipeline remained healthy with recent technology acquisitions made good progress during the year offering exciting future opportunities, with IonPhasE moving into profit • Acquired Rewitec, creating a new range of lubricant additives to extend the life of wind turbines • Expanded our digital programme across our business model, developing knowledge sharing, engaging customers through 'live chat' and using in-silico modelling to develop new products • Working with external Open Innovation partners	• Upgrade innovation centres in Shanghai and USA enabling us to work more closely with local and global customers • Replace traditional petrochemical surfactants with our ECO range of bio-based products particularly for personal and home care applications • Continue to invest in our digital programme	• NPP sales % • Relative NPP sales growth	• Product and technology innovation and protection • Digital technology innovation • Talent development and retention
Sustainability **Aligning our business with our Purpose and accelerating our customers' transition to sustainable ingredients**	• Creating ingredients that provide a benefit in use with reduced environmental impact • Aligning our business with the United Nations Sustainable Development Goals (SDGs)	• Developed our Purpose, Smart Science to Improve Lives™ and a Commitment that by 2030 we will be Climate, Land and People Positive • Developed stretching 2030 KPIs, aligned with the SDGs • Created an Executive position of President of Sustainability to deliver our Commitment to become the most sustainable supplier of innovative ingredients • For the first time in our history we achieved two consecutive months free of any recordable injuries and met our 2020 target a year early	• Continue to increase the positive impact of our actions and deliver benefits for our customers and consumers • Reduce the negative impacts of our actions on our fragile world	• Non-fossil fuel energy • Total Recordable Injury Rate	• Climate change-delivering sustainable solutions • Product quality/liability claims • Major safety or environmental incident • Suppliers and raw material sourcing • Chemical regulatory compliance and product stewardship • Ethics and compliance

Sector strategic priorities

Strengthen to grow Personal Care

Scale Beauty Actives, broaden Beauty Effects portfolio and continue to reinvent Beauty Formulation to deliver top line growth and maintain current margin

See page 22

Expand to grow Life Sciences

Build the Life Sciences brand as a high value add solution for pharmaceutical and crop customers, enhance product range and seek acquisitions of adjacent businesses and technologies to grow top line and increase current margin

See page 24

Refine to grow Performance Technologies

Refine existing product portfolio, focus on fast growth markets and develop geographic footprint to deliver modest sales growth at an improved margin

See page 26

Personal Care

Strengthen to grow

“With a strong margin and active innovation pipeline, Personal Care has weathered the tougher sales environment in 2019 and has a strategy to deliver growth – ‘Strengthen to grow’.”

Sandra Breene
President, Personal Care

Sustainable sugar-based surfactants

2019 saw the full integration of Enza Biotech into the Croda family following its acquisition in 2018. The Enza team is collaborating with other Croda innovation teams globally with the aim of bringing their novel surfactant technology to market. These collaborations include projects with the University of Liverpool’s Materials Innovation Factory, our Process Innovation Team and our global manufacturing sites. These surfactants are sustainable, fully bio-based, sugar-derived and, most importantly, offer high performance in use. Such excellent ‘green’ credentials mean that we can offer new performance and functional claims for our customers and their end-product formulations, meeting the growing demand from consumers for eco-friendly products that really work.

Sandra Breene
President, Personal Care

Sales

£485.2m

2018: £487.8m

Adjusted operating profit

£162.1m

2018: £160.3m

Return on sales

33.4%

2018: 32.9%

Strong business model in Personal Care

Demand in Personal Care slowed in the first nine months of 2019, following strong sales in 2018, as trade headwinds impacted the two largest markets and customers destocked. The fourth quarter saw a return to modest growth as headwinds reduced and key markets recovered in North America and Asia. For the year as a whole, sales declined by 3.0% and adjusted operating profit was unchanged in constant currency. Sales price/mix grew by four percentage points, reflecting a stronger product portfolio and innovation in Beauty Actives and Beauty Effects, while volume was seven percentage points lower, as demand reduced, particularly in the Beauty Formulation business. In reported currency, sales were broadly flat at £485.2m (2018: £487.8m) with adjusted operating profit 1.1% better at £162.1m (2018: £160.3m).

With return on sales up 50 basis points at 33.4% (2018: 32.9%), this demonstrates the resilience of the Personal Care business model, despite the weaker growth environment. IFRS operating profit was £158.2m (2018: £156.6m).

The trade war between the US and China significantly impacted demand for Croda products. US consumer spending in the Personal Care and Beauty category remained constrained, with our customers’ sales broadly flat. In addition, Croda sales were adversely impacted by significant ingredient destocking in the summer months as customers adjusted inventory to the lower than expected demand. However, by the end of the year, Personal Care sales in the US were back in line with end market demand. In North Asia, new legislation restricted Daigou sales into China from the key manufacturing markets of Japan and Korea, whilst local Chinese customers were adversely impacted by a combination of trade uncertainty and tariffs, internet selling regulation and multinational competition. The fourth quarter saw a return to strong sales growth in China and modest growth in Japan/Korea, driving improved demand in Asian markets. Meanwhile, demand in Western Europe remained robust whilst Latin America was weaker. Personal Care sales globally returned to modest growth in the fourth quarter.

The overall driver to performance in 2019 was lower demand. Innovation was maintained, with NPP at 43% of total sector sales (2018: 43%). Beauty Actives, which creates the most valuable claims-based skincare ingredients, saw modest growth in sales, with the strongest demand in the prestige cosmetic market. A new generation of peptides supported a major customer’s anti-ageing product. There is significant market interest in biotech ingredients, sustainable anti-ageing technology created from plant cell culture, new botanicals, such as Banana Flower EC, and, in the future, marine extracts, such as a novel haircare ingredient from Nautilus. The number of new customer projects has increased with the recently expanded R&D facility at Sederma.

Sales in Beauty Effects, which offers similar growth and NPP potential as Beauty Actives, showed good growth, with innovation in Moonshine pigments, with over 50 customers launching products using this innovative colour cosmetics range. Crodabond CSA was launched, delivering on-trend claims and reducing colour fade in haircare applications.

Sales in Beauty Formulation declined by mid single digit percentage, most notably in multinationals and regional customers. By contrast, demand in smaller customers and Indie brands was strongest, benefitting from Croda’s ability to help customers formulate new products. The drive to meet consumer demands for more sustainable products continues. With the North American biosurfactant plant now operational, this will enable new ‘white space’ growth to be delivered by substituting for petrochemical ingredients. This is being supported by our digital programme, from developing application of new digital devices through our investment in Cutitronics to the roll out of a digital selling channel and ‘live chat’ to customers across most of the world, increasing our access to new customers.

With a strong margin and active innovation pipeline, Personal Care has weathered the tougher sales environment in 2019 and has a strategy to deliver growth – ‘Strengthen to grow’. This recognises Croda’s strength through nearly one hundred years in Personal Care, operating in all major markets globally and recognised as the leading innovator in the sector. Growth drivers include an ageing population, the continued rise in disposable income, especially in Asia, use of digitalisation, market fragmentation amongst our customers, and tackling climate change, with a focus on sustainable consumer products. Aiming to deliver low to mid single digit percentage sales growth, our strategic priorities are:

- to continue to **scale** our Beauty Actives business, where we are market leader, through industry-leading innovation and expanding in biotech, delivering above average growth;
- with similar characteristics to Actives, with nearly 80% of sales in NPP and strong margins, Beauty Effects is the smallest of the three businesses; our strategy here is to **broaden** the product range to meet sustainable and lifestyle needs through organic innovation and partnerships; and
- in Beauty Formulation, with its heritage ingredient portfolio but lower NPP, we will continue to **reinvent** this business, developing new points of differentiation, such as introducing sustainable bio-based surfactants and providing unmatched formulation expertise to our customers.

Life Sciences

Expand to grow

“With its growing profitability and exciting product portfolio, Life Sciences is increasing sales and margin. Our strategy for Life Sciences is ‘Expand to grow’.”

Nick Challoner
President, Life Sciences

PaddyRise™ is sustainably improving food security in Malaysia

Rice is an important staple food for Malaysia and in 2019 we opened a new specialist facility there to treat rice with an innovative new seed treatment, PaddyRise™. Treated seeds grow stronger and more resilient young plants, enabling rice to be grown applying less and using fewer plant protection products. This new seed treatment offers farmers reliable and responsible food production and nutrition, as well as the opportunity to increase their incomes whilst improving food security in Malaysia.

Nick Challoner
President, Life Sciences

Sales

£350.5m

2018: £324.5m

Adjusted operating profit

£107.1m

2018: £95.8m

Return on sales

30.6%

2018: 29.5%

Excellent performance in Life Sciences, driven by strength of Health Care and Crop Protection platforms

2019 marked the most successful year ever for Life Sciences. Growth in speciality excipients in Health Care and in differentiated adjuvants in Crop Protection provide an excellent platform to build further. Sales grew by 5.9% in constant currency, margin improved and adjusted operating profit increased 11.6% in constant currency. Sales price/mix added four percentage points, reflecting the ability to capture more value from our innovative products, while volume was two percentage points better. In reported currency, sales were up 8.0% at £350.5m (2018: £324.5m) with adjusted operating profit 11.8% better at £107.1m (2018: £95.8m) and return on sales up 110 basis points at 30.6% (2018: 29.5%). NPP decreased to 27% of sales (2018: 29%), primarily due to lower sales in Seed Enhancement. IFRS operating profit was £97.7m (2018: £89.7m).

After excellent first half year sales growth, demand in the second half year was weaker but margins continued to increase.

In Health Care, growth remained strong in speciality excipients but destocking in consumer health impacted, as did reduced veterinary sales due to the outbreak of African Swine Fever (ASF). The Crop Protection business remained robust but Seed Enhancement had a disappointing fourth quarter, normally the busiest of the year. We continue to expect mid to high single digit percentage organic sales growth for the sector across the medium term.

Full year sales in Health Care grew double digit percentage, continuing to build on its leading market position in speciality excipients. The more complex demands of the latest biologic drug actives are supporting growth of these pharmaceutical delivery systems, with seven new excipients launched in 2019. Growth in Asia continued, with new excipient registrations secured for the Chinese pharmaceutical market. We are investing in significant new capacity, due on stream later in 2020, are developing new purification technologies and have produced our first trial excipient from the acquired Enza technology. Following its acquisition in 2018, we have integrated Biosector into the Health Care innovation and sales teams. Although its vaccine adjuvant sales were lower in 2019 due to customer destocking following the acquisition, as well as lower animal vaccine demand due to ASF, the year ended with record demand, the successful exit of distributors to transfer sales to Croda’s captive distribution model and several new project approvals, including for NanoQuil®, a next generation nanoparticle adjuvant solving customers’ issues of stability and production.

Crop Protection grew by mid single digit percentage, once again ahead of the market. North American demand was impacted earlier in the year by the trade dispute with China and poor weather conditions, but this was fully mitigated as demand switched to Latin America and by an encouraging recovery in sales in the US towards the end of the year. Globally, sales increased with tier 1 multinational crop science companies and with tier 2 customers in Europe and Asia, as we invested in local capability. We integrated our biostimulants business, Plant Impact, into the Crop Protection team, allowing costs to be reduced. With resources focused on delivering innovation across a broader range of high value crops, supported by field trials, new sales are expected to be delayed into 2021. We remain confident in the opportunity for biostimulants in combination with our wider crop and seed business.

Seed Enhancement sales declined 10% in constant currency due to weaker market conditions, albeit with a favourable product mix supporting margins. Demand was disappointing in North America, due to similar conditions as Crop Protection, and China suffered from high customer inventory and lower seed prices. Whilst our strength in Latin America again provided some sales recovery, this was not sufficient to fully offset the shortfall. A recovery plan is in place for 2020, building on our latest innovations, such as X-ray NeXt, which uses artificial intelligence to automate seed sorting, cutting nursery growing time. We launched our new seed treatment, PaddyRise™, to help rice crops be more resilient against diseases and pests such as snails.

We continue to improve the sustainability of our product portfolio in Life Sciences. In line with our Purpose, 2020 will see our voluntary withdrawal from a range of Crop products which can have negative environmental impacts; this is expected to reduce sector sales by two percentage points. We are responding to customer needs and changing regulations by developing new patented technology to create coatings for seeds that are free of microplastics and have also commissioned a new production line for treating organic seeds.

With its growing profitability and exciting product portfolio, Life Sciences is increasing sales and margin. Our strategy for Life Sciences is ‘Expand to grow’. This recognises the opportunities to grow both organically and through acquisition. Growth drivers include the global need to address environmental and social targets through the SDGs, the increasing technology demands of complex drug and crop actives, and the need to increase crop yields with more effective and sustainable treatments. Aiming to deliver mid to high single digit percentage organic sales growth, our strategic priorities are:

- To **build** the Croda brand in Life Sciences, becoming a key solution provider to global pharma and crop markets, **expanding geographically** to support new market development in China, India and Brazil;
- To **enhance** our product portfolio organically and create more **value** by extending our speciality excipient and crop adjuvant ranges and technologies; and
- To **acquire** adjacent businesses and technologies in health and crop care with strong growth prospects.

Performance Technologies

Refine to grow

> "The innovation pipeline is growing as the sector progressively invests in moving to technology-driven markets and reduces its cyclical exposure to more industrial markets. We call this strategy 'Refine to grow'."

Maarten Heybroek
President, Performance Technologies

Ionphase acquisition

With our acquisition of Ionphase, we have enhanced our position within the rapidly growing permanent anti-static additives market for polymers. There is a rapid increase in microelectronic components used in consumer devices attributed to the Internet of Things (IoT) and these delicate components are sensitive to damage from static electricity built up on polymer surfaces. Protecting them from static makes products more durable, increases process efficiency and reduces component rejects, all leading to a reduction in plastic waste.

Maarten Heybroek
President, Performance Technologies

Sales

£430.2m

2018: £456.4m

Adjusted operating profit

£69.4m

2018: £85.2m

Return on sales

16.1%

2018: 18.7%

Disappointing performance in Performance Technologies due to slower industrial markets

After three successive years of double digit percentage profit growth, 2019 marked a disappointing year for Performance Technologies amid economic uncertainty and weak demand. This was driven by poor global automotive sales in the first half year, followed by a general slowing of broader industrial markets in Europe and North America in the second half year. Consequently, sales declined by 7.3% in constant currency, while margin was adversely impacted by 7% lower volume in this higher operating leverage sector, reducing adjusted operating profit by 19.1% in constant currency. Sales price/mix was unchanged, with return on sales 260 basis points lower at 16.1% (2018: 18.7%). In reported currency, sales were down 5.7% at £430.2m (2018: £456.4m) with adjusted operating profit 18.5% lower at £69.4m (2018: £85.2m). IFRS operating profit was £63.8m (2018: £81.7m).

Smart Materials sales declined by 7% in constant currency, with the exit sales rate improving after the business was adversely impacted earlier in the year by the sharp slowdown in new build automotive demand, to which the business is significantly exposed in polymer and adhesives additives. The German car market saw a 23-year low production rate in 2019, down 10% on 2018 and 17% on 2017. Energy Technologies constant currency sales declined by 5% in the full year; in contrast, this reflected a flat first half performance followed by a broader slowing in industrial markets to which the business is exposed in lubricant additives, reflecting trade uncertainty and recessionary conditions in both Europe and the US. Other business sales were down in double digit percentage terms, due to a weak oil and gas market, particularly in North and Latin America.

Action was taken to reduce short-term costs, while maintaining investment for future growth. We are shifting sales and innovation resources towards higher growth areas and new geographies, with encouraging sales progress in Asia and EEMEA in 2019, as Performance Technologies looks to reduce its dependence on its traditional Western European market. Our new China application lab will open in Shanghai in 2020. We have launched digital selling in North America, which is targeted to double the customer base over five years through ease of search, dialogue and sampling.

Although adversely impacted by short-term weakness, the fundamentals for Performance Technologies are good with changes to our end markets creating significant opportunities. The innovation pipeline is growing, with NPP at 19% of sales (2018: 18%), as the sector progressively invests in moving to technology-driven markets and reduces its cyclical exposure to more industrial markets. We call this strategy 'Refine to grow'.

This recognises the opportunities to grow in higher growth markets, organically and through small technology acquisitions, increasing 'knowledge' intensity and reducing 'capital' intensity and operating leverage.

Aiming to deliver low to mid single digit percentage organic sales growth, our strategic priorities are:

- to **refine** the portfolio through further demarketing of low value add business;
- to **focus** on fast growing markets where we have technical competence and digital capability;
- to develop our **geographic** footprint, especially in Asia; and
- to leverage the sector's strong **sustainability** credentials to meet customers' product development needs.

In 2019 investment to develop Smart Materials into new technology areas in high value polymers included a £25m capital project in the UK which should come on stream in 2021. We secured promising inroads into new niches, but these are not yet big enough to offset volatility in more traditional market areas and we are accelerating development. This includes additive applications for the circular plastics economy, creating biodegradable and recyclable packaging, and moving away from single use plastics.

In Energy Technologies we acquired Rewitec, whose lubricant additives extend the life of wind turbines, a fast growing market in renewable energy. 2019 also saw Ionphase move into profit – a 2017 technology acquisition, this market-leading technology in electrostatically dissipative polymers offers exciting opportunities in electronics and packaging applications, with over fifty new customer-product applications added in 2019. In the home care market, the commissioning of the North American bio-based plant is creating significant customer interest in moving away from petrochemical-based surfactants. Coltide, a protein platform to extend the life of fabrics, is becoming a key sustainability driver. Our Purpose plays to the strengths of Performance Technologies, from bio-based raw materials sequestering carbon from the atmosphere to increased engine efficiency through our lubricant additives.

Industrial Chemicals

"We continue to refine the product portfolio in Industrial Chemicals."

Maarten Heybroek
President, Industrial Chemicals

Crodaboost 200

Through our biosurfactant plant at Atlas Point in North America, we can offer our customers bio-based, sustainable alternatives to traditional petrochemical derived ingredients, without loss of functionality. Crodaboost 200 is a patented product that helps corn ethanol producers to maximise revenues while cutting waste. It enables the separation of stillage, a corn ethanol by-product, effectively extracting the valuable corn oil. When made with bio-based feedstock, Crodaboost 200 offers multiple sustainability benefits, including the ability to optimise by-products as well as replacing petrochemical ingredients.

Maarten Heybroek
President, Industrial Chemicals

Sales

£111.8m

2018: £118.2m

Adjusted operating profit

£1.1m

2018: £1.2m

Return on sales

1.0%

2018: 1.0%

Continued portfolio development in Industrial Chemicals

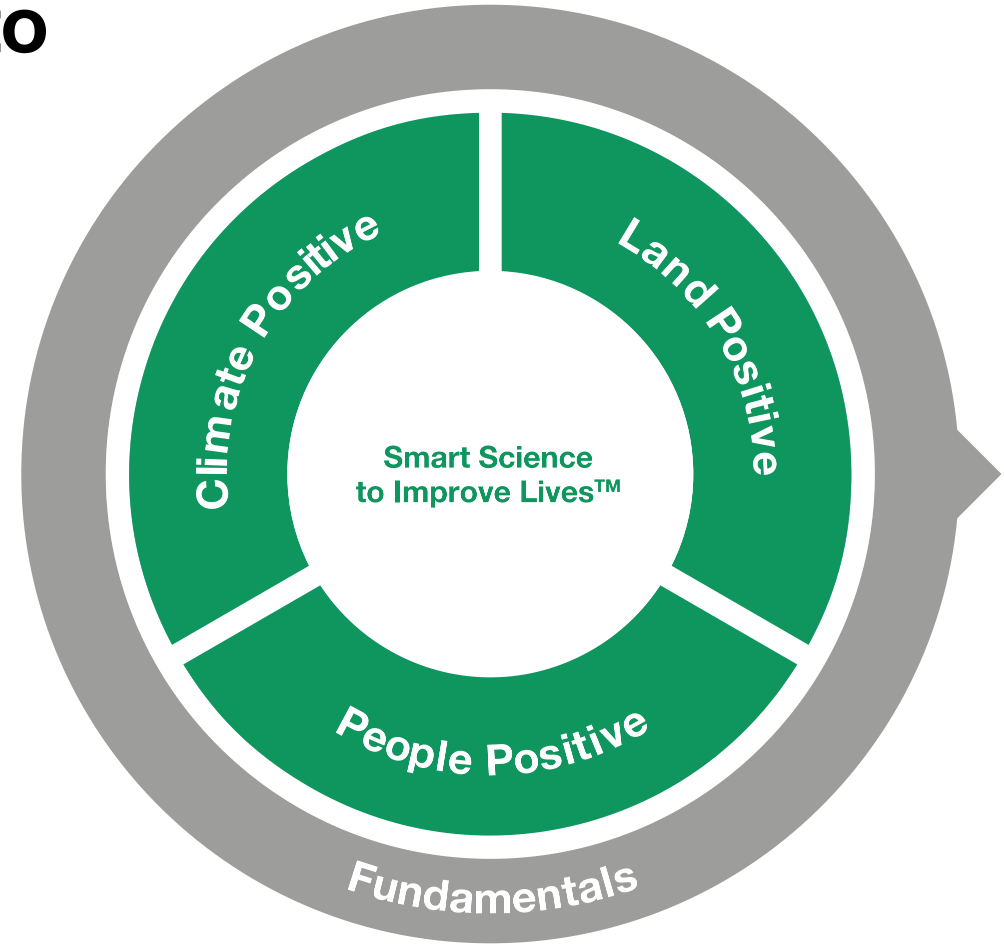
We continue to refine the product portfolio in Industrial Chemicals, reducing volume of low value co-product and tolling business. In constant currency, sales declined by 6.6%. Our China manufacturing operation, Sipo, saw an encouraging improvement in sales and the commissioning of a new plant to improve future profitability. Sipo was reviewed for potential goodwill impairment but the future value remains above the carrying value, albeit with limited headroom. In reported currency in 2019, Industrial Chemicals sales reduced to £111.8m (2018: £118.2m) and adjusted operating profit was broadly unchanged at £1.1m (2018: £1.2m). IFRS operating profit was £0.2m (2018: £0.8m).

Strategic Report

Sustainability: our path to 2030

By 2030 we will be Climate, Land and People Positive

As part of this Commitment, we will become the most sustainable supplier of innovative ingredients



Climate Positive

We will help our customers to avoid carbon emissions through the benefits our innovative ingredients deliver, whilst continually reducing our carbon footprint. We will increase our use of bio-based raw materials, which take carbon from the atmosphere to grow. Combining these benefits, we will enable more carbon to be saved than we emit, throughout our operations and supply chain. By 2030, we will be Climate Positive.

Land Positive

The use of our crop protection ingredients helps farmers to increase yields and crop resilience. Our continual innovation will help customers to mitigate the impact of climate change and land degradation, increasing the availability of land suitable for growing crops. The use of our products will enable more land to be saved than is used to grow our bio-based raw materials. By 2030, we will be Land Positive.

People Positive

We will use our smart science to improve the lives of our own employees and people all around the world. We will contribute to SDG 3, developing ingredients to improve health and wellbeing, provide access to our smart science through our Foundation, and encourage and promote diversity within our organisation. We will apply our innovation to increase our positive impact on society. By 2030, we will be People Positive.

Fundamentals

We will protect the health and safety of all of our people, contractors and communities in which we operate, giving priority to the areas of our business that give us our social licence to operate.

Climate Positive

Carbon Cover

We will enable the transition to a low-carbon economy. We will be Climate Positive, working closely with our customers to develop products that offer carbon saving benefits in use.

Target
- By 2030, use of our products will avoid four times the carbon emissions associated with our business, our 4:1 carbon cover ratio

Reducing Emissions

We will achieve our Science Based Targets (SBTs) by reducing our emissions in line with limiting the global temperature rise to 1.5°C above pre-industrial levels, maximising the use of renewable energy in our operations.

Targets
- By 2030, we will have achieved our SBTs, in line with limiting global warming to 1.5°C above pre-industrial levels
- Thereafter, by 2050 we will achieve net zero scope 1 and 2 GHG emissions

Sustainable Innovation

We will accelerate the transition to bio-based products, moving away from fossil/petrochemical feedstocks.

Target
- By 2030, over 75% of our organic raw materials by weight will be bio-based, sequestering carbon from the atmosphere as they grow

Land Positive

Land Use

We will save more land than we use. We will increase agricultural land use efficiency, protect biodiversity and improve food security by sourcing sustainably and inspiring innovation in our agrochemical businesses.

Target
- By 2030, the land area saved through the improved yields and crop resilience as a result of the use of our crop protection ingredients and seed treatment technologies will exceed that used to grow our raw materials

Crop Science Innovation

We will invest in innovation projects and partnerships to support crop and seed enhancement in mitigating the impact of a changing climate and land degradation.

Targets
- Through to 2030 we will bring an average of two crop technological breakthroughs to market each year that are in alignment with our SBTs and which help our customers mitigate the impact of climate change and land degradation
- By 2030, we will have established three new partnerships to contribute to the recovery of compromised farmland. We will work with customers, universities and business councils to achieve this

People Positive

Health & Wellbeing

We will use our smart science to promote healthy lives and wellbeing through the development and application of our ingredients and technologies.

Targets
- By 2030, we will contribute to the successful development and commercialisation of 25% of WHO listed pipeline vaccines
- By 2030, we will protect at least 60 million people annually from potentially developing skin cancer from harmful UV rays, through the use of our sun care ingredients

Gender Balance

We will achieve gender balance in our business by focusing on recruitment and development opportunities to increase the number of women in decision-making positions.

Target
- By 2030, we will achieve gender balance across the leadership roles in our organisation

Improving More Lives

We will promote our smart science and help improve lives using our technologies within our local communities, where our science can make a positive difference. We aim to create STEM educational opportunities and provide basic necessities through the use and application of our ingredients.

Target
- We will establish and fund a Croda Foundation to help improve more lives in our local communities, supported by our technologies

GHG emissions

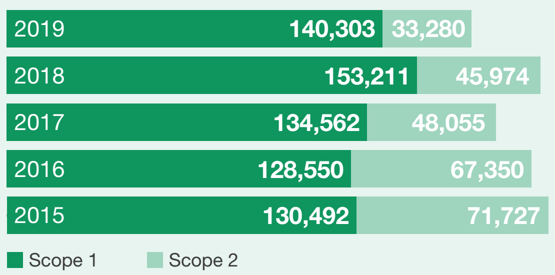
Since 2015, our baseline year, total scope 1 and 2 GHG emissions have significantly reduced by 14.2%. Within this, our scope 1 emissions have increased by 7.5%, whilst we have seen a greater than 50% reduction in scope 2 emissions.

We have been reporting market-based scope 2 emissions since 2017, which better reflect our efforts in purchasing renewable electricity at greater levels than the national averages in the countries in which we operate. We have seen a 67% increase in the absolute amount of non-fossil based scope 2 energy purchased between 2015 and 2019, now representing >70% of our indirect energy consumption.

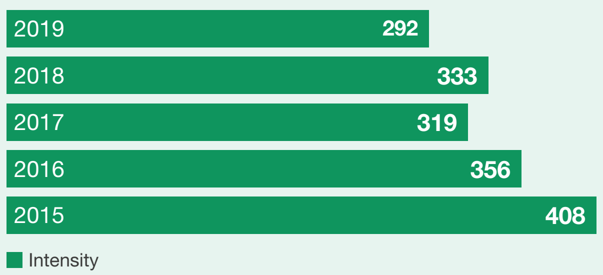
Our chosen measure of GHG emission intensity divides our GHG emissions (market-based scope 2 emissions) by value added: a measure of our business activity. Our 2015 baseline year was calculated using location based scope 2 emissions as a proxy. Since 2015, our GHG emissions intensity has fallen by 28.5%, illustrating how we are decoupling growth from our environmental impact.

Our scope 1, 2 and 3 GHG emissions are verified by Carbon Smart. Their formal Independent Verification Statement is available at www.croda.com/carbonverification. For more information see our 2019 Sustainability Report.

GHG emissions ($TeCO_2e$)[1]



GHG emissions intensity ($TeCO_2e$/£m)



Fundamentals

Health, Safety and Wellbeing

Targets
- By 2030, we will achieve an OSHA Total Recordable Injury Rate in the top 10% for the chemical industry
- By 2030, we will achieve a 30% increase in positive responses to the wellbeing areas in our Global Employee Culture Survey

Process Safety

Target
- By 2030 we will have zero significant process safety incidents per year. We will continue to investigate and apply learnings from minor incidents and near misses
- By 2030 we will conduct an independent peer review of our Process Risk Reviews (PRRs) for high hazard processes

Environmental Stewardship

Targets
- By 2025, we will eliminate process waste to landfill across our operations
- By 2030, we will reduce our water use impact by 50% from 2018 level

Fair Income

Target
- By 2030, everyone working at Croda locations, including temporary and permanent employees, and all contractors, will receive a living wage that is monitored and reviewed annually

Supplier Partnership

Target
- By 2030, we will ensure that all key suppliers are responding to EcoVadis and engaging with us to improve practices

Knowledge Management

Target
- By 2025, 100% of our employees will receive a minimum of one week's training per year

Quality Assurance

Target
- By 2030, we will achieve a 99.5% Right First Time (RFT) rate

Product Stewardship

Target
- By 2030, we will have conducted full life cycle assessments for our top 100 ingredients

Responsible Business

Targets
- By 2023, we will achieve an EcoVadis score of at least 85
- By 2030, we will achieve 'outstanding' CSR performance ratings across all themes within the EcoVadis assessment

Diversity and inclusion

We embrace the differences of a multi-ethnic, multi-geographic and multi-skillset company. In 2019, we achieved our objective of women making up at least a third of the Board. However, we need to replicate this across the business, which is part of our ongoing Diversity and Inclusion Programme.

Across the Group

Female 1,530
Male 3,050
Split: 33.4% female, 66.6% male

Board of Directors

Female 3
Male 6
Split: 33.3% female, 66.7% male

Executive Committee Members

Female 2
Male 7
Split: 22.2% female, 77.8% male

Regional and Business Board Members and Senior Functional Heads

Female 25
Male 85
Split: 22.7% female, 77.3% male

Non-financial information statement

Please see page 60 to find out where all non-financial matters are located within our Annual Report as required under the Non-Financial Reporting Directive.

Taskforce on Climate Related Financial Disclosures (TCFD)

Governance	Our Board are responsible for dealing with risks and opportunities associated with climate change.	See page 38
	All management positions share the responsibility of assessing and managing relevant climate related risks and opportunities.	
Strategy	We have identified a range of short, medium and long-term climate related risks and opportunities.	See page 30
	Climate related risks and opportunities are taken into account within our business, strategy and financial planning.	
	We look at a 1.5°C scenario alongside our business strategy and are committed to bold emissions reduction targets.	
Risk Management	Climate related risks are integrated into our risk assessment process and are assessed using our risk framework.	See page 40
	Climate related risks are reviewed by the board and monitored regularly through our SHEQ committee.	
	We have thorough processes in place for assessing and managing climate related risks, which are integrated into our overall risk management framework.	
Metrics and Targets	We have several climate related targets in line with a 1.5°C scenario, which have a range of metrics to ensure we are meeting our targets.	See page 30
	We monitor our scope 1, scope 2 and scope 3 GHG emissions, and the related risks.	
	We have a range of stretching KPIs to help us manage climate-related risks and opportunities and performance against targets.	

Key Performance Indicators

How we performed

Strategic objectives key

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

KPIs update

During 2020 our key sustainability KPIs will change to reflect our 2030 commitments to be Climate, Land and People Positive. The sustainability KPIs below will continue to be reported in our Sustainability Report.

KPI	Comment	Target	Our performance

On target

Return on sales (ROS) %

KPI definition: Adjusted operating profit as a percentage of sales.

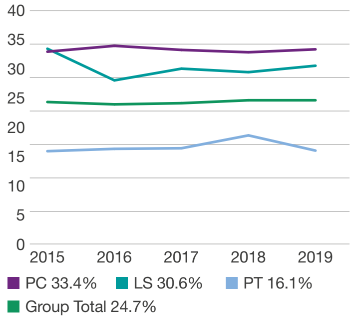
Comment: Group ROS was unchanged at 24.7% despite subdued market conditions, reflecting the strength of our business model. Life Sciences was the standout performer in the year, with strong sales growth accompanied by record ROS. Personal Care demand slowed but excellent ROS saw profit broadly unchanged in constant currency. After a record performance in 2018, Performance Technologies had a disappointing year amid weak demand in automotive and wider industrial markets. Lower sales adversely impacted ROS in this more volume sensitive business, although its fundamentals remain attractive for the medium term.

Target: Personal Care (PC) maintain 2018 level.

Life Sciences (LS) grow to equal Personal Care in the medium term.

Performance Technologies (PT) grow to 20% in the medium term.

Our performance: Return on sales %



Behind target

Core Business sales growth %

KPI definition: Total sales growth in the Core Business measured at constant currency.

Comment: Core Business sales declined in 2019, despite strong sales growth in Life Sciences, reflecting difficult market conditions in Personal Care and Performance Technologies. Key markets for Personal Care recovered as we exited the year, but industrial markets remained subdued.

Target: Low-to-mid single digit % growth (excluding raw material price recovery).

Our performance: Core Business sales growth %

2019	-2.3%
2018	3.8%
2017	5.6%
2016	4.6%
2015	4.2%

On target

New and Protected Products (NPP) sales %

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

Comment: We focus technically and commercially on increasing the proportion of Group sales from NPP. The percentage was broadly unchanged in 2019, adversely affected by a slowdown in Seed Enhancement, but our innovation pipeline remains healthy. We continue to accelerate innovation by investing in resources, projects and technology acquisitions that enable us to work more closely with customers and create sustainable solutions that meet their needs.

Target: NPP sales to be 30% of Group sales in the medium term.

Our performance: NPP sales %

2019	28.1%
2018	28.2%
2017	27.6%
2016	27.4%
2015	26.1%

Behind target

Relative NPP sales growth

KPI definition: NPP sales growth; targeted to be at least twice the ratio of non-NPP sales.

Comment: NPP and non-NPP sales both declined in 2019, reflecting difficult trading conditions across many of our markets. Over a three year period, NPP sales growth has been 1.8x non-NPP growth, slightly below our target.

Target: 2x non-NPP sales growth over the last three years.

Our performance: Relative NPP sales growth

	NPP growth %	Non-NPP growth %	Ratio
2019	-3.5%	-2.3%	<2x
2018	+4.8%	+2.2%	2.2x
2017	+5.3%	+4.4%	1.2x
2016	+6.9%	+1.7%	4.0x
2015	+15.5%	+0.7%	22.2x

Behind target

Non-fossil fuel energy %

KPI definition: The proportion of our energy that comes from non-fossil fuel sources.

Comment: This was a challenging target for us. In 2019, 22.7% of our energy was from non-fossil sources. For the first time in 2019 we had this number externally verified by Carbon Smart. As we move to our 2030 Emissions reduction target we expect this number to increase significantly as sites look to source renewable energy and decarbonise.

Target: 27% by 2020.

Our performance: Non-fossil fuel energy %

2019	22.7%
2018	21.1%
2017	24.1%
2016	21.3%
2015	20.5%

On target

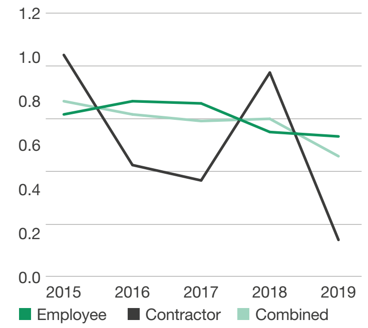
Total Recordable Injury Rate (TRIR)

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

Comment: We met this target a full year ahead of schedule. The TRIR was 0.55, including two consecutive months free of any recordable injuries for the first time in our history. The injury rate for contractors under direct supervision saw a major reduction.

Target: Achieve a sustained OSHA TRIR in the top quartile of manufacturing companies with more than 1,000 employees by 2020 (0.60).

Our performance: Total Recordable Injury Rate (TRIR)



Creating shareholder value

On target

Adjusted basic earnings per share (EPS)

KPI definition: Adjusted profit after tax divided by the average number of issued shares.

Comment: The subdued market conditions in the year had an adverse impact on adjusted basic EPS which fell to 185.0p, a decrease of 2.7% on last year. Over the last 3 years we have increased EPS by an average of just over 6% pa.

Target: 5-11% EPS growth per annum over the last three years.

Our performance: Adjusted basic earnings per share (EPS)

2019	185.0p
2018	190.2p
2017	179.0p
2016	155.8p
2015	135.0p

Behind target

Return on Invested Capital (ROIC) %

KPI definition: Adjusted operating profit after tax divided by the average adjusted invested capital for the year for the Group. Adjusted invested capital represents net assets adjusted for net debt, earlier goodwill written off to reserves and accumulated amortisation of acquired intangible assets.

Comment: Our KPI definition has been amended in 2019 to more closely align with common market practice. ROIC fell to 17.0% in 2019, below our medium-term target. This reflects our recent programme of increased capital expenditure, including the construction of our North America biosurfactant plant, and increased acquisition spend. This is expected to improve (subject to the impact of any further acquisitions) as the profit benefits of recent investments develop over the coming years.

Target: Achieving ROIC of around 20% on the underlying business in the medium term (i.e. excluding short term dilution from acquisitions).

Our performance: Return on invested capital %

2019	17.0%
2018	19.2%
2017	21.2%
2016	22.1%
2015	23.2%

Driving profit and cash flow

"A key strength of the Croda model is its cash generation. In 2019, free cash flow increased by 30%."

Jez Maiden
Group Finance Director

Sales value

£1,377.7m

2018: £1,386.9m

Adjusted profit before tax

£322.1m

2018: £331.5m

Free cash flow

£201.7m

2018: £154.9m

Currency

Currency translation benefitted reported sales and profit in the first half year as Sterling weakened against the dollar, before recovering later in the year. Sterling averaged US$1.278 (2018: US$1.334) and €1.141 (2018: €1.130).

Sales

Sales in reported currency reduced by 0.7% to £1,377.7m (2018: £1,386.9m). Constant currency sales fell by 2.6%, including a £11.0m benefit from acquisitions.

Sales	£m	%
2018 reported	1,386.9	
Underlying growth	(47.4)	(3.4)
Impact of acquisitions	11.0	0.8
2019 constant currency	1,350.5	(2.6)
Impact of currency translation	27.2	1.9
2019 reported	**1,377.7**	**(0.7)**

In the Core Business, constant currency sales reduced by 2.3%. Sales volume was 5% lower, partly offset by price/mix adding 3%, driven by innovation and an improved product portfolio. Sales in Life Sciences grew by nearly 6%, whilst Personal Care sales were 3% lower and Performance Technologies declined over 7% due to weakness across industrial markets.

Sales at constant currency	First Half %	Second Half %	Full Year %
Personal Care	(3.6)	(2.3)	(3.0)
Life Sciences	13.0	(0.9)	5.9
Performance Technologies	(6.0)	(8.6)	(7.3)
Core Business	(0.4)	(4.2)	(2.3)
Industrial Chemicals	(7.4)	(5.7)	(6.6)
Group	**(1.0)**	**(4.3)**	**(2.6)**

Adjusted profit

Adjusted operating profit decreased by 0.8% in reported currency to £339.7m (2018: £342.5m). Operating costs reduced, with the benefit of actions to reduce costs and no annual bonus charge due to profit being slightly below the previous year. No depreciation charge was incurred in 2019 on the North American biosurfactant plant, as this did not come into operation until early in 2020. The impact of its increased capital cost and delayed commissioning has been reviewed but it was not considered to be at risk of impairment, with the plant forming part of the profitable North American business.

Income statement	2019 £m	2018 £m
Revenue	**1,377.7**	1,386.9
Cost of sales	**(865.5)**	(864.6)
Gross profit	**512.2**	522.3
Adjusted operating costs	**(172.5)**	(179.8)
Adjusted operating profit	**339.7**	342.5
Net interest charge	**(17.6)**	(11.0)
Adjusted profit before tax	**322.1**	331.5

Adjusted operating profit declined by 1.8% in constant currency due to lower sales and the impact of acquisitions. Reflecting the strong business model, return on sales remained unchanged at 24.7% (2018: 24.7%) in reported currency.

Adjusted operating profit	£m	%
2018 reported	342.5	
Underlying growth	(5.3)	(1.6)
Impact of acquisitions	(0.7)	(0.2)
2019 constant currency	336.5	(1.8)
Impact of currency translation	3.2	1.0
2019 reported	**339.7**	**(0.8)**

The margin improvement saw adjusted operating profit increase modestly in Personal Care in reported currency, broadly flat in constant currency. Life Sciences grew profit strongly, whilst profit in Performance Technologies was sharply lower, as reduced volume impacted fixed cost recovery in this more volume sensitive business.

Adjusted operating profit	2019 Reported £m	2019 Constant currency £m	2018 Reported £m
Personal Care	**162.1**	159.9	160.3
Life Sciences	**107.1**	106.9	95.8
Performance Technologies	**69.4**	68.9	85.2
Core Business	**338.6**	335.7	341.3
Industrial Chemicals	**1.1**	0.8	1.2
Group	**339.7**	336.5	342.5

The net interest charge increased to £17.6m (2018: £11.0m) in reported currency and £17.1m in constant currency. 2019 saw higher debt from the payment of a special dividend and the acquisition of Biosector at the end of 2018. In addition, the prior year benefitted from capitalisation of interest on the North American biosurfactant plant, construction of which was materially completed in 2018 when capitalisation of interest to the project therefore stopped. However, as noted above, delays in commissioning the plant, together with a small leak after first start up, prevented the plant becoming operational until early in 2020. Adjusted profit before tax reduced to £322.1m (2018: £331.5m).

The effective tax rate increased to 25.6% (2018: 24.6%), reflecting reduced profit in lower tax jurisdictions. There were no significant adjustments between the Group's expected and reported tax charge based on its accounting profit. Adjusted profit after tax in reported currency was £239.7m (2018: £249.9m). Adjusted basic earnings per share (EPS) decreased to 185.0p (2018: 190.2p).

IFRS profit

IFRS profit is measured after exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition. The charge for these before tax was £19.8m (2018: £13.7m). Exceptional items in the current year were £10.7m related to delivery of cost saving actions (the exceptional cost in the prior year was £4.9m, relating to a past service cost on the UK defined benefit pension scheme). Acquisition costs were £0.3m (2018: £2.7m) and the charge for amortisation of intangible assets was £8.8m (2018: £6.1m). Profit before tax on an IFRS basis was £302.3m (2018: £317.8m), the profit after tax was £223.8m (2018: £238.3m) and basic EPS were 172.8p (2018: 181.4p).

Income statement	2019 £m	2018 £m
Adjusted profit before tax	**322.1**	331.5
Exceptional items, acquisition costs & intangibles	**(19.8)**	(13.7)
Profit before tax (IFRS)	**302.3**	317.8
Tax	**(78.5)**	(79.5)
Profit after tax (IFRS)	**223.8**	238.3

Cash management

A key strength of the Croda model is its cash generation. In 2019, free cash flow increased by 30.2% to £201.7m (2018: £154.9m) in reported currency, after funding net capital expenditure of over £100m, which will see new capacity become available during 2020. Working capital management improved during the year after a disappointing 2018. The strong cash flow helped support almost £267m in dividends to shareholders, including a special dividend of 115 pence per share paid in May 2019. There were no material acquisitions in the year.

Cash flow	2019 £m	2018 £m
Adjusted operating profit	**339.7**	342.5
Depreciation and amortisation	**57.6**	50.1
EBITDA	**397.3**	392.6
Working capital	**1.6**	(69.3)
Net capital expenditure	**(106.8)**	(103.1)
Payment of lease liabilities	**(8.8)**	(0.5)
Non-cash pension expense	**2.8**	3.8
Interest & tax	**(84.4)**	(68.6)
Free cash flow	**201.7**	154.9
Dividends	**(266.9)**	(110.5)
Acquisitions	**(5.0)**	(82.5)
Other cash movements	**(17.9)**	4.4
Net cash flow	**(88.1)**	(33.7)
Net movement in borrowings	**115.4**	15.2
Net movement in cash and cash equivalents	**27.3**	(18.5)

After currency translation, and including leases under the newly adopted accounting standard IFRS16 (which brought £46.0m of additional lease debt onto the balance sheet on transition), net debt increased to £547.7m (2018: £425.5m), a leverage ratio of 1.4 times (31 December 2018: 1.1x). During the year, the Group refinanced its principal bank debt and issued US private placement bonds at attractive pricing, and at 31 December 2019 had £1,058.6m of committed debt facilities available with principal maturities between 2023 and 2029, providing undrawn committed facility headroom of £463.8m (2018: £358.4m).

Case study:

‘Green’ banking

Reflecting our new Purpose, Smart Science to Improve Lives™, Croda worked with a core group of nine banks to promote delivery of our sustainability objectives within the Group’s principal committed bank facilities. Aligned with Croda’s commitment to be Climate Positive by 2030, the new funding agreement requires Croda to reduce its carbon use every year by a specified amount. Provided Croda achieves this challenging target, the banking group will reduce the interest margin which Croda pays, and Croda will reinvest this saving in sustainability projects. If Croda does not achieve the target in any year, Croda will pay a higher interest margin and our banking group will reinvest this in sustainability projects. As a result, our ‘green’ banking facility achieves alignment between Croda and its core banking partners in delivering sustainability for our fragile world.

Capital allocation

Croda seeks to deliver high quality profits, measured through a superior return on invested capital (ROIC), earnings growth and strong cash returns. Following a recent programme of increased capital expenditure, including the construction of our North America biosurfactant plant, our organic investment is now returning to our normal, more ‘capital light’ model. In addition, we have seen increased technology acquisition spend in recent years, whereby new exciting technologies are acquired but where it is likely to take several years to reach commercialisation. As a result, capital employed has nearly doubled since 2014. Consequently, ROIC has reduced to 17.0% (2018: (restated definition): 19.2%). This is expected to improve as the profit benefits of recent investments develop over the coming years, although we will continue to seek new opportunities to invest capital as set out below.

The Group has also introduced a measure of Economic Value Added (EVA) as an underpin to its Remuneration Policy (p72). This reinforces the importance of delivering superior returns on invested capital.

The Group’s capital allocation policy is to:

1. **Reinvest for growth** – Croda seeks to 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** – we pay a regular dividend to shareholders, representing 40 to 50% of adjusted earnings over the business cycle. The Board has proposed an increase of 3.4% in the full year dividend to 90.0 pence (2018: 87.0p), representing 49% of adjusted EPS;
3. **Acquire disruptive technologies** – we have identified a number of exciting technologies to supplement organic growth in existing and adjacent markets. Some of these will be acquired, either as nascent opportunities for future scale-up or as larger complementary acquisitions. During 2019, we increased our associate investment in the personal care device company, Cutitronics, and acquired Rewitec in Performance Technologies; and
4. **Maintain an appropriate balance sheet and return excess capital** – we maintain an appropriate balance sheet to meet future investment and trading requirements. We target leverage of 1.0 to 1.5x (excluding retirement benefit schemes), although we are prepared to move above this range if circumstances warrant. We consider returning excess capital to shareholders when leverage falls below our target range and sufficient capital is available to meet our investment opportunities. In 2019, we paid a special dividend of 115p per share (£151.5m).

Brexit update

In 2019 we undertook contingency planning for the UK leaving the European Union (EU) without a transition arrangement. In the event, this was not required. We are now planning for the UK leaving the EU at the end of 2020 (‘Brexit’). With 96% of sales and 84% of production outside the UK, the overall impact is expected to be limited. Our focus remains on ensuring our ability to offer continuity of service and supply to our customers, through our Brexit-ready trading model, customer service and supply chains, and in compliance with regulatory frameworks under a number of different Brexit scenarios.

Retirement benefits

The post-tax deficit on retirement benefit plans, measured on an accounting valuation basis under IAS19, increased to £60.1m (2018: £12.4m), largely due to lower corporate bond yields. This is expected to result in an increase in the Income Statement charge in 2020 of around £3m. Cash funding of the various plans is driven by the schemes’ ongoing actuarial valuations. No deficit funding payments are currently required to the largest pension plan, the UK Croda Pension Scheme, with the next valuation due at 30 September 2020.

Jez Maiden
Group Finance Director

Alternative performance measures

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

- *Constant currency results:* these reflect current year performance for existing business translated at the prior year’s average exchange rates and include the impact of acquisitions. For constant currency profit, translation is performed using the entity reporting currency. For constant currency sales, local currency sales are translated into the most relevant functional currency of the destination country of sale (for example, sales in Latin America are primarily made in US dollars, which is therefore used as the functional currency). Sales in functional currency are then translated into Sterling using the prior year’s average rates for the corresponding period. Constant currency results are reconciled to reported results in this Finance Review;
- *Adjusted results:* these are stated before exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition, and tax thereon. The Board believes that the adjusted presentation (and the columnar format adopted for the Group income statement) assists shareholders by providing a meaningful basis upon which to analyse underlying business performance and make year-on-year comparisons. The same measures are used by management for planning, budgeting and reporting purposes and for the internal assessment of operating performance across the Group. The adjusted presentation is adopted on a consistent basis for each half year and full year results;
- *Return on sales:* this is adjusted operating profit divided by sales, at reported currency;
- *Return on Invested Capital (ROIC):* this is adjusted operating profit after tax divided by the average adjusted invested capital for the year. Adjusted invested capital represents net assets adjusted for net debt, earlier goodwill written off to reserves and accumulated amortisation of acquired intangible assets. This definition has been amended in 2019 to more closely align with common market practice (no longer adjusting invested capital for pensions, deferred tax or provisions). The amended definition has been applied consistently to all comparatives in the 2019 Annual Report and Accounts;
- *Net debt:* comprises cash and cash equivalents (including bank overdrafts), current and non-current borrowings and lease liabilities;
- *Leverage ratio:* this is the ratio of net debt to Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA). EBITDA is adjusted operating profit plus depreciation and amortisation; and
- *Free cash flow:* comprises EBITDA less movements in working capital, net capital expenditure, payment of lease liabilities, non-cash pension expense, and interest and tax payments.
- *Economic Value Added (EVA):* this is adjusted operating profit after tax less the charge for invested capital (‘CIC’) in that year. CIC is the average adjusted invested capital for the year for the Group multiplied by the Group’s post-tax cost of capital.

Protecting value

Our Risk Framework enables the business to protect value, enhancing the realisation of opportunities and minimising the threats to the delivery of our strategic and operational objectives.

How we manage risk

Our risk management programme is owned and overseen by the Board, which has overall responsibility for ensuring that our risks are aligned with our goals and strategic objectives (p64). The Audit Committee assists the Board in monitoring the effectiveness of the risk management and internal control policies, procedures and systems (p65).

Each of our more than 50 strategic and operational risks are owned by an Executive member, and are categorised into 17 subcategories enabling transparent reporting at all levels. The Risk Framework, embedded in the Digital Hive (see case study), is used to drive an integrated, three lines of defence management approach through the culture of the organisation, across sectors, operations, regions and functions.

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. It is the role of local management and ultimately the Executive to ensure that risks are managed, maintained, reviewed and actioned according to the framework. The second line of defence, the Risk Management Committee, meets quarterly to review, challenge and monitor current and emerging risks using a bottom-up and top-down approach. Our global reporting dashboard enables transparent comparison of risks across regions, operations and sectors. The third line of defence is assurance. This is provided through internal control audits and deep dive risk assurance audits, in addition to reports from external assurance providers, the results of which are reviewed by three Executive Committees and monitored and challenged by the Audit Committee and the Board.

Risk Framework: what we monitor

Our risk landscape

Current risks

Risks we are managing now that could stop us achieving our strategic goals

Emerging risks

Risks with a future impact from external or internal opportunities or threats; slow moving as well as rapid velocity

Six categories, 17 subcategories, over 50 generic risks, one system

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

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
- **Actions:** for further mitigation if required

Executive Risk Register

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

Our bottom-up registers

The core of our Risk Framework. Owned by market sectors, regions, manufacturing sites and functions, they identify local risks and mitigating controls arising from day-to-day operations in over 25 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 (p64).

Approves the viability statement.

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 (p65).

Reviews viability scenario assessments.

Risk Management Committee*

Meets quarterly to monitor risks other than SHEQ and Ethics. Standing agenda item to monitor business IT systems and cyber risks and currently Brexit risk.

Agenda covers proactive risk management, risk monitoring and mitigation and consideration of internal and external emerging risks.

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

Considers the results of internal audit work for all risks.

SHEQ Steering Committee*

Meets quarterly to review Safety, Health, Environmental and Quality (SHEQ) risks.

Monitors against stretching targets and agreed KPIs.

Considers the results of assurance audits over SHEQ controls.

Ethics Committee*

Meets quarterly to review ethics and compliance risks.

Monitors against agreed KPIs.

Considers the results of assurance audits over Ethics controls.

* Executive Committee (p70)

Risk appetite

In July 2019 a cross functional team reviewed and refreshed our statements of risk appetite. The team developed risk appetite statements at subcategory level with a view to making risk appetite more transparent to risk managers and owners and to provide guidance when considering risk incidents. The statements were reviewed by the Board and the Risk Management Committee and have been embedded into our risk reporting dashboard.

Our key risks

Our Risk Heat Map identifies the key pre-mitigation risks (a subset of all the risks in the Risk Framework) that we consider may threaten the delivery of our long-term strategic goals, and these are explained in further detail in the table on pages 39 to 42, together with their link to our business strategy and business model. The Board has carried out a robust assessment of these key risks and has taken them into consideration when assessing the long-term viability of the Company on page 43.

Changes to our gross risk environment in 2019

Geopolitical risks relating to the revenue impact of the US/China relationship, increased political and economic uncertainty globally and Brexit on business growth were prominent once again, as was the risk of major safety and environmental incident following the ECO incident. Climate change, both its impact on our customers and our business, has always been a risk but has been assessed as more likely and therefore has moved into the key risks list for the first time. We have combined Innovation and Intellectual Property (IP) risks in 2019 as they are closely linked; effective IP protects our innovations.

Risk management in action

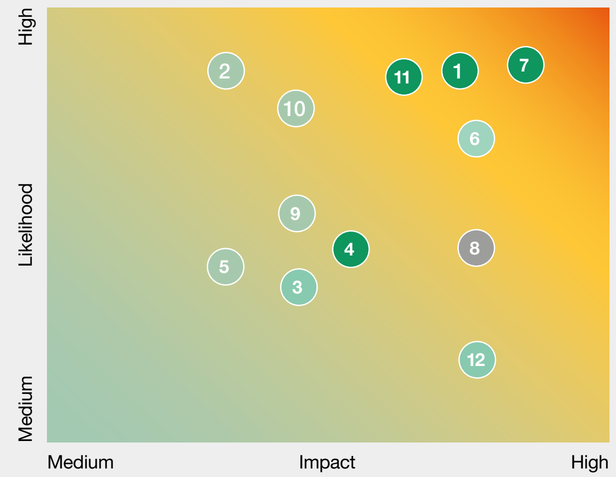
The Digital Hive

In August 2019 a team completed the project to migrate our Risk Framework from Excel to a new online system. Developed in partnership with PwC (our internal audit co-source partner) the Digital Hive is our global risk, control and action system. It provides transparent, real time visibility of all the Group's risks identified through the risk management framework process. This reinforces individual ownership of both the risks and the mitigating controls and supports direct links between our risk and control frameworks.

Risk Heat Map

Our principal risks are reported gross (before mitigating controls)

Strategic risk	
1	Revenue generation in established and emerging markets
2	Product and technology innovation and protection
3	Digital technology innovation
4	Climate change – delivering sustainable solutions
People and culture risk	
5	Talent development and retention
Process risk	
6	Product quality/liability claims
7	Major safety or environmental incident
8	Suppliers and raw material sourcing
External environment risk	
9	Chemical regulatory compliance and product stewardship
10	Ethics and compliance
Business systems risk	
11	Security of business information and networks
Financial risk	
12	Ineffective management of pension fund



Gross risk increase

Gross risk no change

Gross risk decrease

Key risk

Strategic

1. Revenue generation in established and emerging markets
Sector Presidents
Executive owner

V
E S

Why this matters to us

To grow, we need to both keep pace with our customers as they follow consumers into emerging markets and maintain revenue from our established markets, protecting these from mainstream and other chemical companies looking to move into our established markets. Failure to manage these challenges amid growing geopolitical tensions including China/USA trade and Brexit will adversely impact delivery of our strategic objective to deliver consistent top and bottom line growth.

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 and our direct selling model enables us to get closer to our customers. Our strong business model (p12) and focus on growing the bottom line faster than the top line mitigates profit impact in difficult trading conditions.

What we have done in 2019

- Despite increased trade headwinds, regulatory change in China, USA/China tensions and customer de-stocking, Personal Care delivered excellent margin growth and maintained adjusted operating profit (p23) and Life Sciences delivered record sales performance (p25)
- Performance Technologies, most impacted by economic uncertainties and weak demand, took action to reduce short-term costs whilst shifting sales and innovation resources (p27) to reduce dependence on traditional Western Europe markets
- Our Brexit team continued to plan for leaving the EU without a transition agreement (p37). This was a standing item on the Risk Committee agenda
- Planned to reinvest in over 100 new roles to support growing markets (p16)

2. Product and technology innovation and protection
Nick Challoner
Executive owner

= V
E C

Why this matters to us

Innovation plays a critical role across our operations; it differentiates us from the competition, protects sales and improves our margins. Failure to drive New and Protected Products (NPP) through innovation will impact on growth.

Failure to protect the intellectual property in these products in both 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, are fully integrated into our sectors and focus innovation on customer requirements. Guided by our key technology platforms, we **invest** in: R&D, Open Innovation and Smart Partnership programmes with universities, specialist research laboratories and SMEs, seeking out premium niches and disruptive technology acquisitions. Our specialist IP team **protect** new products and technologies, defending our IP and challenging third party IP where appropriate.

What we have done in 2019

- Rewitec acquisition and integration (p19)
- Acquired a new application laboratory and expanded the R&D facility at Sederma (p23)
- Launched new products in all sectors (p22 to p28) including a new generation of peptides to support a major customer's anti-ageing product and new seed treatments (p24)
- Recent technology acquisitions/investments (Enza, Nautilus, SiSaf and Cutitronics) delivered exciting product development opportunities (p19)

3. Digital technology innovation
Jez Maiden
Executive owner

= V
E C M S

Why this matters to us

Disruptive digital technology has an increasing impact, changing both our customer base and the way we interact with all external partners. Customers expect an even higher level of online service, from researching ingredients to buying. Digital also touches operations and research and development (R&D), enabling knowledge sharing and driving efficient process.

How we respond

Dedicated centres of excellence provide global leadership to take advantage of the fast evolving digital world and deliver an integrated market facing environment that encompasses everything from product development to artificial intelligence enabled manufacture to customer service. E-cells embedded in the organisation support agile, local trials of innovative ideas, which can grow into global initiatives.

What we have done in 2019

- Continued to invest in our digital programme, focused on digital solutions across our business model (p19):
- Create: in silico modelling and AI
- Make: improving global supply chain management and new tools to enhance manufacturing efficiency
- Sell: roll out of a digital selling channel via our enhanced website supporting customers with literature downloads, online sample supply and 'live chat'

4. Climate change – delivering sustainable solutions
Stuart Arnott
Executive owner

V
C M

Why this matters to us

Using smart science to turn bio-based raw materials into innovative ingredients with sustainable benefits in use has always been at the core of our strategy. However, increasing global concerns over climate change and land use have heightened both our customers' and our own focus. Failing to remain ahead in this key area of differentiation for us will damage our reputation and compromise growth.

How we respond

In line with our purpose, Smart Science to Improve Lives™ our ambition is to become the most sustainable supplier of ingredients. By aligning our smart science with United Nations Sustainable Development Goals (SDGs) we will help to tackle some of the biggest challenges the world is facing.

What we have done in 2019

- Developed and communicated our Purpose – Smart Science to Improve Lives™
- Aligned our smart science with SDGs (p18)
- Developed stretching sustainability targets; by 2030 we will be Climate and Land and People Positive. Read more on page 18 and in our Sustainability Report
- Sector strategies focus on sustainable solution delivery (p22 to p28)
- Planned voluntary withdrawal from products with negative environmental impacts (p25)

People and culture

5. Talent development and retention
Tracy Sheedy
Executive owner

=
E C M S

Why this matters to us

The vision and experience of our knowledgeable and specialist employees is critical to maintaining our success. Inability to recruit and retain appropriately skilled employees with diverse backgrounds could adversely impact our ability to deliver our current and future business requirements and strategic priorities.

If these individuals were to leave, it would take time to replace them if no succession plans were in place.

How we respond

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.

The annual global talent review process supports review of resources and succession plans for critical roles, with actions monitored by the Executive Committee and the Board.

What we have done in 2019

- Shared our Croda culture and vision, captured in our Purpose statement, supported throughout the year by listening events, pulse surveys and town hall meetings
- Developed stretching targets, aligned with SDGs, to be People Positive by 2030 (p30). See our Sustainability Report for more details

Process fundamentals

6. Product quality/liability claims
Tom Brophy
Executive owner

= V
M S

Why this matters to us

We sell into a number of highly regulated applications. Non-compliance both with our customers' stringent product quality requirements and local regulation could expose us to liability claims and reputation damage, especially in light of our commitment to sustainability.

How we respond

Monitored by our Group SHEQ Steering Committee (p70), 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 manage compliance, 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.

What we have done in 2019

- Continued to monitor and proactively address underlying causes of Not Right First Time (NRFT) and customer complaints
- Aligned our quality targets with SDGs and set stretching new targets for 2030 (p31). See our Sustainability Report for more details

7. Major safety or environmental incident
Stuart Arnott
Executive owner

V
M

Why this matters to us

We rely on the continued sustainable operation of our manufacturing sites around the world.

A major event causing loss of production, or violating safety, health or environmental regulations, could limit our operations and expose the Group to liability, cost and reputation damage, especially in light of our commitment to sustainability and customer service.

How we respond

Monitored by our Group SHEQ Steering Committee (p70), our global network of safety specialists located at each site enforce compliance with the policies and procedures defined in the Group SHE manual. Assurance over mitigating controls is provided by the dedicated Group SHE internal audit team, whilst external auditors certify our compliance with international safety standards.

We have business continuity plans in place for each site and a Group Crisis Management Plan that is tested at least annually.

What we have done in 2019

- Increased risk likelihood as we brought major new capacity on stream in North America (biosurfactant and speciality excipients plants), mitigated by the close involvement of both our SHEQ and external specialists to provide review and oversight
- Reduced process safety incidents by almost 3x, with none classified as serious or with major accident potential (p33)
- Refreshed Croda Behavioural Safety programme which helped us to meet our personal injury target a year ahead of schedule
- Aligned our SHE targets with SDGs and set stretching new targets for 2030 (p31). See our Sustainability Report for more details

8. Suppliers and raw material sourcing
Stuart Arnott
Executive owner

M

Why this matters to us

An interruption in the supply of key raw materials would significantly affect our operations and financial position. Such a disruption could arise from market shortages or from restrictive legislation, for example relating to the transport of hazardous goods. Sourcing from suppliers with a different ethical stance from our own could lead to reputation damage, especially in the light of our commitment to sustainability.

How we respond

Professional purchasing teams based in our regions develop good relationships with our suppliers. They monitor supply to identify and manage potential future shortages. To protect supply, we agree long-term contracts where appropriate, source from multiple suppliers, or where this is not possible build up our own inventories. We ask higher risk suppliers to complete an EcoVadis self- assessment and follow up results with them.

What we have done in 2019

- Risk assessed and ranked our suppliers globally in terms of geography and industry. Key suppliers requested to complete EcoVadis questionnaires covering four sustainability pillars: Environment, Labour and Human Rights, Ethics and Sustainable Procurement
- Aligned our supply chain targets with SDGs, and set stretching new targets for 2030 to engage with our suppliers on ethical issues as well as to ensure security of supply (p31). See our Sustainability Report for more details

Link to our strategy (p20)

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

Risk movement

- Risk increase
- = No change
- Risk decrease
- V Included in viability statement

Link to our business model (p12)

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

Key risk

External environment		Business systems and security	Financial
9. Chemical regulatory compliance and product stewardship Stuart Arnott Executive owner C M S	**10. Ethics and compliance** Tom Brophy Executive owner V E C M S	**11. Security of business information and networks** Jez Maiden Executive owner V E C M S	**12. Ineffective management of pension fund** Jez Maiden Executive owner
Why this matters to us			
As a global chemical manufacturer, we operate in highly regulated markets, which are subject to regular change. Violation, incomplete knowledge or change of the appropriate regulations could limit the markets into which we can sell or expose the Business to fines or penalties. In addition, product stewardship principles are increasingly becoming enshrined within both chemical and end use legislation.	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 give rise to an elevated compliance and reputational risk.	We rely heavily on the availability of IT networks and systems; an extended interruption of these services may result in an inability to operate. Society and business are subject to more numerous and increasingly sophisticated threats to security, including hackers, viruses and ransomware attacks that could compromise access. In addition, regulatory responsibilities relating to data privacy and protection are becoming more stringent globally, including General Data Protection Regulation (GDPR).	We maintain an open defined benefit pension scheme in the UK, which faces similar risks to other defined benefit schemes such as future investment returns, longer life expectancy and regulatory changes that could result in pension schemes becoming more of a financial burden.
How we respond			
Global regulatory expertise is provided by our in-house team of specialists (PSRA), who have in-depth knowledge of the regional and market regulatory frameworks within which we operate. They work proactively to influence regulation and they are an integral part of our new product development process. We use the SAP EHS module to ensure that regulatory changes are applied to existing products. Our global product advisory teams (PAD) work closely with customers to identify the most appropriate product selection for their needs.	Our Group Ethics Committee (p70) meets quarterly to consider new legislator requirements and to promote the importance of ethics and compliance across our business and those third parties we choose to work with. Compliance training and education programmes are rolled out globally, with results monitored by the Committee.	We run our key applications in distributed computing environments with regular failover testing. In line with our established global policies, our information security specialists monitor our IT services and networks, oversee computer and mobile device protection and provide cyber awareness education globally. Regular penetration testing is undertaken and we have externally audited ISO 27001 certification for key systems and locations, whilst internal and external auditors review and report on the operation of all cyber and system controls annually.	The Group maintains close dialogue with the UK Pension Trustee, and the move to a career average capped salary basis of calculation in 2016 mitigated some of the risks. The pension fund investment strategy (including a triennial valuation review) is delivered with the support of professional advisers, and trained pension fund Trustee Directors take professional advice and monitor and review arrangements quarterly.
What we have done in 2019			
• Influenced discussion regarding the impact of Brexit on the UK chemical regulatory environment • Set stretching new 2030 targets to conduct full life cycle assessments for our top 100 ingredients (p31). See our Sustainability Report for more details	• Successfully rolled out Phase 2 of our data privacy programme, which extended the scope of data privacy reporting requirements globally (based on GDPR) • Completed 2 year roll out of our Ethics refresh programme, monitored by the Ethics Committee • Completed a post implementation internal audit of the adoption of new ethics compliance processes into business as usual, sharing the report with the Audit Committee • Established monitoring KPIs for the Ethics programme	• Internal audit risk assurance review of cyber risks • Trained Audit Committee in cyber risks (p67) • Internal audit review of site resilience preparedness in the event of prolonged SAP downtime • Completed regular external penetration testing programme	• Monitored continued fully funded status of the largest pension plan (the UK Croda Pension Scheme). No deficit funding payments were required (p37)

Long-term viability statement

Viability statement

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 2022 in line with the Company's financial and strategic time planning horizons.

Assessment of prospects

In assessing the prospects of the Company and determining the appropriate viability period, the Board has taken account of:

- the financial and strategic planning cycle, which covers a three-year period. The strategic planning process is led by the Group Chief Executive and fully reviewed by the Board;
- the investment planning cycle, which covers three years. The Executive Committee considers, and the Board reviews, likely customer demand and manufacturing capacity for each of its key technologies. The three-year period reflects the typical maximum lead time involved in developing new capacity;
- the business model (p12) 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;
- the Company's strong cash generation and its ability to renew and raise debt facilities in most market conditions (p35); and
- the strong innovation pipeline (p22 to p27), 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. The Board reviews this over a period of longer than three years in line with longer development cycles for new products. However, the Board considers that, in assessing the viability of the Company, its investment and planning horizon of three years, supported by detailed financial modelling, is the appropriate period.

Assessment of viability

Viability has been assessed by considering the 'top-down headroom' available in terms of the overall funding capacity to withstand events, together with the 'bottom-up headroom' assessing the potential financial impact of events reflecting the Company's principal risks, both individually and in combination. Top-down headroom is considered to be more than adequate, and the results of the bottom-up scenario modelling showed that no individual event or plausible combination of events would have a financial impact sufficient to endanger the viability of the Company in the period assessed. It would, therefore, be likely that the Company would be able to withstand the impact of such scenarios occurring over the assessment period.

Top-down headroom

Bank leverage covenant	The ratio of net debt to EBITDA at the end of 2019 of 1.4x remains substantially below the maximum covenant level under the Group's lending facilities of 3.5x, providing significant headroom. EBIT would need to fall by more than 72% before triggering an event of default. Action could also be taken to conserve cash.
Debt headroom	The current level of committed debt facilities of £1,059m would support a gross leverage of circa 2x and significant additional credit is likely to be available to the Group up to circa 3x leverage. Refinancing of the Group's credit facilities in 2019 (p138) means renewal will fall at the earliest in 2024, outside the viability period.

Bottom-up headroom

Each of the key risks identified on pages 40 to 42 has been assessed for its potential financial impact as part of the viability assessment. Of these, the most severe but plausible scenarios (or combinations thereof) were identified as follows:

Scenario modelled	Link to key risks
Business loss due to regional geopolitical or economic events – adverse Brexit impact.	1. Revenue generation in established and emerging markets (p40)
New entrants or enhanced competition in our market space.	1. Revenue generation in established and emerging markets (p40)
Disruptive technology – the impact of substitute chemical or process technologies affecting current sales as modelled, together with the impact of new digital technology affecting our historical routes to market.	2. Product and technology innovation and protection (p40) 3. Digital technology innovation (p40)
Uninsured catastrophic loss of a manufacturing site – the impact of losing the contribution from the single largest site was considered assuming no insurance cover. However, for most loss events, we carry insurance cover.	7. Major safety or environmental incident (p41)
Significant compliance breach – the financial impact of regulatory fines was considered along with the associated reputational damage.	10. Ethics and compliance (p42)
Significant cyber-attack results in loss of IT systems (particularly SAP) for a prolonged period.	11. Security of business information and networks (p42)

Chair's letter

"I am confident that the 2030 strategy will enable the business to continue to deliver value for our stakeholders."

Anita Frew
Chair

Dear fellow shareholder

Good governance is at the heart of everything we do. Our governance framework and our strong focus on ethics underpins the Board's commitment to the highest standards of corporate governance and sets the tone for the rest of the organisation.

The Board is accountable to Croda's shareholders for good governance and this report, together with the Directors' Remuneration Report, set out on pages 71 to 97, 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 Code for the period under review.

The Company's disclosures on its application of the main principles of the Code can be found as follows.

Building on our Purpose, the Board reviewed and developed our long-term strategy through to 2030, and you can read more about how the Board approached this on page 45. I am confident that the 2030 strategy will enable the business to continue to deliver value for our shareholders. Our strong commitment to sustainability is embedded into this strategy and our Purpose, Smart Science to Improve Lives™.

Culture and values

The Board has a vital role to play in promoting and nurturing a culture and behaviours that are consistent with delivering our strategy and ensuring the success of Croda in the long term. Following on from the in-depth work on creating 'Our Purpose' in 2018, we have begun to implement and embed it across the Group. Further detail on how the Board have engaged in this work is outlined on page 45.

A vital focus for us as a Board is ensuring the health and safety of all our employees, suppliers, communities and visitors and it is the first operational matter discussed at each Board meeting.

Our culture is a key strength of our business and we see the benefits of this in our employee engagement and retention. One way that the Board monitors and assesses the culture of the Group is by spending a considerable amount of time meeting with employees and visiting our offices and manufacturing sites around the world.

The Board actively seeks opportunities outside the boardroom to understand what is happening across the organisation and this engagement, particularly by the Non-Executive Directors, provides our Board with deeper insights into particular areas as well as supporting the Executive management. On pages 53 and 55 we set out details of the Board's programme of activities outside the boardroom and our engagement with our employees.

As a Board we reviewed our engagement with key stakeholders to ensure we have appropriate mechanisms in place to understand their views and take them into account in our discussions and decision making. The Directors' duties under s172 of the Companies Act 2006 underpin the good governance which is at the centre of our decision making. Page 55 describes how the Board engages with each of our key stakeholders and gives some examples of how we have considered them in some of the Board's decisions made during the year.

An extensive consultation with shareholders was undertaken to revise our Remuneration Policy and details of our new Policy are in the Remuneration Report. Details of how we have complied with the provisions of the Code are in the Corporate Governance Report on pages 44 to 97.

Leadership

We regularly assess the skills and experiences of the Board to ensure that we have the right balance and composition.

Steve Williams retired at the 2019 Annual General Meeting having made an outstanding contribution to Croda. Alan Ferguson has announced his intention to retire at the Annual General Meeting in April 2020 having served nine years as a Director. This is in line with the Board's succession plan and we commenced a search for a suitable replacement and consideration of his successor as Audit Committee Chair early in the year. Full details of the process that the Board undertook is outlined in the report of the Nomination Committee on page 62.

In December 2019 we announced that John Ramsay would join the Board as a Non-Executive Director with effect from 1 January 2020. This allows a good period to complete key induction activities and spend time with Alan Ferguson before his retirement in April 2020, at which point John Ramsay will become Audit Committee Chair. John brings with him a wealth of financial, international and sector experience and we are delighted to welcome him to the Board.

On the recommendation of the Nomination Committee, the Board agreed to extend Helena Ganczakowski's appointment for a further year. This annual extension is in line with our policy to review appointments annually once six years' tenure has been completed. Helena has made a significant contribution to the Board as Remuneration Committee Chair and she will take over from Alan as Senior Independent Director on his retirement.

Diversity and succession planning

Diversity has continued to be a key item on our agenda during 2019. We consider that diversity on the Board and throughout the Company has a positive effect on the quality of decision making and is a key factor in the Company's strategic and financial success. I am pleased to confirm we have in excess of 30% of women on the Board and in November we appointed another woman, Tracy Sheedy, Group HR Director, to our Executive Committee.

We have continued our focus on succession planning to ensure that we have a healthy talent pipeline for future Executive Committee and Board roles. We have a range of activities aimed at improving diversity in leadership including a mentoring programme with Board and Executive Committee members for high potential candidates. This work is described in more detail in the on page 63.

We have made good progress, but there remains more work to be done to improve diversity and develop our management population. We are committed to this and to continuing to develop our talent at all levels to create our leaders of the future.

Effectiveness

It is an important requirement of good governance that an annual evaluation is carried out to ensure we continue to operate and perform effectively. The Board and Committee review for 2019 was conducted using an online questionnaire, designed by Lintstock, with input from me and the Company Secretary. The next evaluation toward the end of 2020 will be externally facilitated. The evaluation was very positive and good progress had been made with implementing the outcomes from the 2018 evaluation in relation to the focus on allowing more time for strategic discussions and the continuing focus on succession planning. Further details on the evaluation is on page 60.

Annual General Meeting

There is the opportunity for all shareholders to attend the Annual General Meeting on 23 April 2020 and meet the Board, Chairs of the Board Committees and members of senior management. I would be delighted to answer any questions that shareholders may have.

Anita Frew
Chair

Case study:

Bringing our Purpose to life

The Board and Executive Committee worked together to define and develop three core elements of who we are, how we operate and our future ambition, each one centred on a different aspect of what makes our business special.

- Our Purpose sets the tone and direction for the business, offering the opportunity to unite ideas, behaviours and practices.
- Our Commitment is setting the stretching, long-term goals to ensure we are leading positive change for the environment and society and addressing the challenges facing the world today.
- Our Difference is aligning our culture and behaviours to truly reflect our Purpose in everything we do.

Our Purpose was shaped directly in partnership with our employees, with support from the Executive Committee and guidance from the Board. We launched a global competition amongst our employees to create a statement that described the reason for the organisation's being. The winner of the competition was "Smart Science to Improve Lives™". The Board and the Executive Committee considered that this encapsulated how we have always combined our knowledge, passion and entrepreneurial spirit to create a positive difference to the environment and to society. The Board worked closely with the Executive Committee to use our Purpose to set our Commitment – an ambition that builds on our heritage of sustainability, to become Climate, Land and People Positive by 2030. Part of this process involved working closely with the Cambridge Institute for Sustainability Leadership to review the SDGs and identify the impact Croda has on those goals. Our Difference shaped our culture and behaviours bringing them to life by three guiding values of Together, Responsible and Innovative.

Throughout 2019 the Board has overseen internal engagement and motivation around our Purpose. A cross-functional team of employees was formed to engage all employees and facilitate the embedding of our Purpose, our Commitment and our Difference.

The Board approved an implementation plan focused on engaging, empowering and exciting all employees. This started with engaging senior leaders to align and focus our activities, but also thinking about the longer-term change management required to ensure that our Purpose truly guides and shapes our decisions. The plan used a multi-channel communications approach, ensuring that messages are shared with the organisation, whilst building in mechanisms for employees to get involved directly. This included an internal social media initiative, using crowd-sourced videos, where employees were encouraged to put into their own words what Smart Science to Improve Lives™ means to them.

The Board has been consulted at each stage of the Purpose journey, reviewing and contributing to the plan and associated activities. The Board has ensured that the plan is being delivered, alongside reviewing the organisation's receptivity to change.

Our leadership team

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

N

Anita Frew, 62
Chair

Appointment: March 2015 and Chair since September 2015

"I have served on Plc boards in the chemical, resources, engineering, water and financial services industries for over 20 years. Prior to joining Croda I was Chair of Victrex Plc and Senior Independent Director of Aberdeen Asset Management Plc and IMI plc. During my time as a director I chaired main Boards, Remuneration, Responsible Business and Risk Committees. Currently, I am also Deputy Chair of Lloyds Banking Group plc and a Non-Executive Director of BHP Plc and BHP Limited. I therefore bring to the Croda Board extensive experience as Chair and leadership in strategic management, mergers and acquisitions and risk experience from working internationally across many sectors."

E F SHEQ

Steve Foots, 51
Group Chief Executive

Appointment: July 2010 and Group Chief Executive since the beginning of 2012

"Joining Croda as a graduate trainee in 1990, I bring 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, I also have great insight into the markets we serve, the importance of customer focus and the power of our innovative culture. Outside of Croda, my role as Industry co-Chair of the UK Chemistry Council enables me to work alongside government ministers and industry peers to bring wider industry knowledge into our business."

R E F

Jez Maiden, 58
Group Finance Director

Appointment: January 2015 as Group Finance Director

"I am an experienced Group Finance Director, having served in this role on five UK listed company Boards. As a chartered management accountant, my expertise in all aspects of finance management, gained in speciality chemical, FMCG and other manufacturing environments, allows me 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. I act as business partner to the Group Chief Executive and lead the finance team globally. Outside of Croda I am a Non-Executive Director and Audit and Risk Committee Chair of PZ Cussons Plc."

A RM N

Alan Ferguson, 62
Non-Executive Director (Senior Independent Director)

Appointment: July 2011

"As a CFO, Non-Executive and Audit Committee Chair, I have worked for a number of large international businesses including Inchcape, BOC, Johnson Matthey and The Weir Group. This breadth of experience has given me exposure to diverse end markets, many of which Croda serves, and deep international financial experience. I have also seen what good looks like in areas such as leadership, compliance and health and safety. I share Croda's passion for sustainability and working hard whilst having fun. I feel a deep responsibility to serve Croda's shareholders well."

RM A N

Helena Ganczakowski, 57
Non-Executive Director

Appointment: February 2014

"With 23 years of experience in marketing and corporate strategy at Unilever and a further eight as a strategic consultant for other multinational businesses, I aim to bring marketing skill and an end-consumer perspective to the boardroom, as well as challenge and support to the CEO in strategy development. My academic roots in engineering, with a PhD from Cambridge University, drive my passion and curiosity for both product and process innovation. I am also a Non-Executive Director of Greggs Plc."

Board and Committee Changes

Steve Williams stood down on 24 April 2019. His biography is set out in the 2018 Annual Report and Accounts.
John Ramsay was appointed to the Board and Committees on 1 January 2020.

A RM N

Roberto Cirillo, 48
Non-Executive Director

Appointment: April 2018

"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, I bring to the boardroom my knowledge and passion in growth and operations. I also share lessons-learned from large transformations and M&A. My engineering background enables me to link Croda's R&D and production competences with the evolving demands of its multinational markets. Next to my role as Non-Executive Director for Croda, from April 2019 I became CEO of Swiss Post. I 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, 49
Non-Executive Director

Appointment: September 2018

"I am an experienced CEO from the technology industry with general management and M&A experience in international and emerging markets. I have first-hand insight of transformational/disruptive digital, cyber security, technology and business process solutions. I spent three years in Silicon Valley as Chief of Staff at Hewlett Packard, focused on a new company strategy and turnaround. I also chaired the public services strategy board for the CBI. Away from Croda, I am a Non-Executive Director of John Wood Group Plc and Tesco Bank, a fellow of the IET, a Trustee of Engineering UK, a member of the Scottish First Ministers Advisory Board and a member of the Advisory Board of Engie UK."

N

Keith Layden, 60
Non-Executive Director

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

"I bring to the Board 33 years' experience of working at Croda in a variety of positions, most recently leading the Global Research, Development and Innovation function and President of the Global Life Sciences business. I also have an interest and background in organisational culture, which is a key consideration in the decision making of the Board. In my 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, I widen my network of emerging technology companies and research institutes and spot new talent that will aid Croda's future success."

A RM N

John Ramsay, 62
Non-Executive Director

Appointment: January 2020

"I am extremely pleased to have been invited to join the Board. I have over 30 years' broad based international finance background with Life Science businesses of ICI, AstraZeneca and Syngenta. A large part of this experience was gained while working in Latin American and Asian countries. I am looking forward to using this experience to help Croda develop and execute its business strategy. I have a strong interest in the impact of leadership and company culture and am particularly keen to help Croda leverage its strong culture to deliver superior business performance. In taking over, later this year, the Chair of the Audit Committee, I hope to maintain the high standards and respected style set by my predecessor Alan Ferguson. I am also a Director and Audit Committee Chair at Koninklijke DSM NV, RHI Magnesita NV and G4S PLC."

ET A RM N R E

Tom Brophy, 46
Group General Counsel, Company Secretary and MD Western Europe

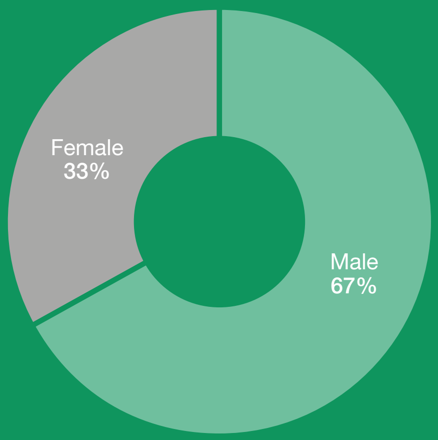
Appointment: December 2012 as Board Secretary

"I am an experienced corporate lawyer, having worked at City law firm Hogan Lovells and FTSE 100 company Ferguson. My expertise of public and private acquisitions supports Croda's inorganic growth plans and my professional background and breadth of experience in insurance, risk and compliance enable me to Chair the Ethics Committee. I provide corporate governance knowhow to the Board and Croda. Having spent many years leading global teams, I am proud to lead the Legal and Company Secretary team. More recently I have also taken on a commercial role with Croda as Managing Director of our Western European Region."

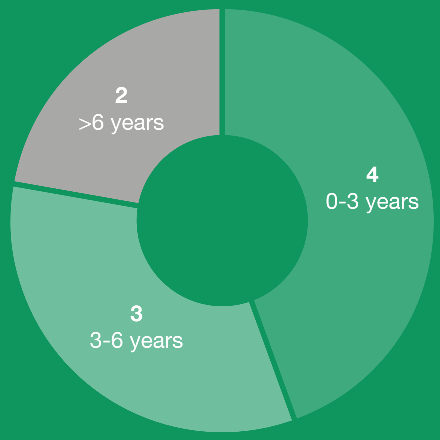
Corporate Governance: At a glance

Board diversity, composition and activity

Gender of the Board



Tenure of Directors



Board activity in 2019

Board changes during the year
Steve Williams retired on 24 April 2019. John Ramsay was appointed on 1 January 2020.

Board skills and experience (p46 and 47)

Current skills

Sector	Operational	Financial	Strategy
Risk	Innovation	Technical	Marketing
Digital	International	General management	Health & safety

Areas of opportunity for future Board appointments

- Emerging markets
- Sustainability
- Digital marketing

Professional backgrounds: sales, banking, legal, accountancy, marketing, general management, digital, R&D.

Nationalities: British and Swiss

Key stakeholders (p54)

Employees

Shareholders

Customers

Local Communities

Suppliers

Progress on focus areas for 2019

Key actions	What we did	Status
Focus on safety leadership	• Safety leadership considerations were integral to the development of the 2030 strategy • Received updates on developments in safety leadership across the business • Undertook training on process safety principles	Completed
Nurture and promote the Croda values	• Worked with the Executive Committee to set the tone and direction for the next stage of the work on the Group's Purpose • Considered how to build internal engagement and motivation around our Purpose. See case study on page 45 • Supported the development of the three guiding values of 'Together', 'Responsible' and 'Innovative'	Completed
Consider insights and longer-term trends from our customers and external markets	• Received detailed reports on markets and trends as part of the development of the 2030 strategy • Received regular reports from the CEO on customer trends and external markets and quarterly reports on each market sector from the Sector Presidents • Visited sites in US, UK, Europe and Asia	Completed
Ensure sustainability and digital become integral components of our long-term strategy development	• These factors were considered in depth as part of the 2030 strategy development work • Sustainability is our key commitment and at the core of our 2030 strategy • Developed non-financial KPIs for sustainability • Building digital competence is a core enabler to the 2030 strategy	Completed

Looking ahead to 2020

- Ensure safety leadership continues to be prioritised and performance monitored
- Oversee the embedding of our sustainability commitment to be Climate, Land and People Positive by 2030
- Focus on the balance between organic/inorganic growth and the short term/2030 strategic plans
- Continue to support and challenge management in the delivery of the 2030 strategy, with a focus on organisational structure and capability

Meetings

Membership of the Board and attendance (eligibility) at Board meetings held during the year ended 31 December 2019.

Anita Frew (Chair)	6 (6)
Roberto Cirillo	6 (6)
Alan Ferguson	6 (6)
Jacqui Ferguson	6 (6)
Steve Foots	6 (6)
Helena Ganczakowski	6 (6)
Keith Layden	6 (6)
Jez Maiden	6 (6)
Steve Williams*	2 (2)

* Steve Williams retired from the Board on 24 April 2019.

Board leadership and company Purpose

Board leadership

At the date of this report, the Board comprises nine Directors: the Chair; the Group Chief Executive; the Group Finance Director; five 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 our Board allows time for full discussion and debate of items and enables all Directors' views to be heard. The Non-Executive Directors have a broad range of business, financial and international skills and experience, which provide appropriate balance and diversity. The composition of the Board is subject to ongoing review and a key consideration for any new Board appointment will be the additional breadth a new Director could bring, including in terms of skills, knowledge, experience, gender and ethnicity.

Information on the process undertaken to appoint John Ramsay to the Board is outlined in the Nomination Committee report on page 62.

Directors' biographical notes appear on pages 46 and 47 and at www.croda.com.

With support from the Company Secretary, the Chair sets the annual Board agenda programme and Board meeting agendas and determines the number of meetings to be held during the year. She ensures enough time is devoted, during meetings and throughout the year, to discuss all material matters, including strategic, financial, operational, business, risk, human resources and governance issues.

All members of the Board have clearly defined roles and further information on Board roles and responsibilities is on page 58.

The Board agenda is structured to ensure a balance is maintained between reporting, approvals and governance matters, whilst also ensuring a significant proportion of each meeting is devoted to strategic topics. Presentations from non-Board members and more informal opportunities to meet a wider range of employees are also incorporated.

Role and operation of the Board

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 ensuring the long-term sustainable success of the Company for all stakeholders. It monitors operational and financial performance against agreed goals and objectives and challenges the executive team. The Board 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.

Matters reserved for the Board

The matters reserved for the Board fall into four broad areas

1. Matters required by law to be reserved for the Board's decision, such as approving the Annual Report and Accounts, appointing new Directors and declaring dividends.
2. The requirements of the UK Listing, Prospectus and Disclosure and Transparency Rules, such as approving circulars to shareholders and other significant communications.
3. UK Corporate Governance Code recommendations, such as ensuring the Group has a sound system of internal control and risk management, and approving the Board and Committees' terms of reference.
4. Other matters, such as approval of the Group's strategy and budget, material corporate transactions and capital expenditure.

For full schedule of matters reserved for the Board visit www.croda.com.

Conflicts of interest

The Board has an established process for declaring and monitoring actual and potential conflicts. The Articles of Association of the Company allow the non-conflicted members of the Board to authorise a conflict or potential conflict situation. Jez Maiden has a Non-Executive Director role on the board of PZ Cussons Plc, a customer of Croda. The Board does not consider that this role would affect Jez's judgement in relation to Croda and its business.

Details of the professional commitments of the Chair and the Non-Executive Directors are included in their biographies on pages 46 and 47. The Board is satisfied that these do not interfere or conflict with the performance of their duties for the Company.

During 2019, Steve Williams retired from the Board having served nine years. Tenure of the remaining independent Non-Executive Directors ranges between a year and a half and almost nine years at the year end. Keith Layden served just over five years as an Executive Director, prior to his appointment as a Non-Executive Director on 1 May 2017. Details of changes to the Board since the year end are outlined on page 61.

The terms and conditions of appointment of Non-Executive Directors can be viewed at www.croda.com. They 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.

External consultants

In the period Deloitte have provided remuneration consultancy to the Remuneration Committee.

2030 – The next chapter of growth

At the start of the year, the Board and the executive team completed the engagement with our employees to define the Purpose of Croda. Smart Science to Improve Lives™ encapsulates how we combine our knowledge passion and entrepreneurial spirit to create a positive difference to the environment and to society. Further information on this is included on page 45.

Having defined our Purpose, the Board, working with the executive team, agreed a number of strategic questions to set the foundation for the creation of a new strategic ambition and strategic priorities. This exercise considered amongst other things the macro trends that would shape the markets and the megatrends in each of the sectors. Trends in consumer behaviour and how we could further leverage our strengths were analysed, as well as to identify new opportunities. Our people and their development were a key focus throughout, recognising the importance of ensuring that our culture remained aligned with the core strategic ambitions. Sustainability and innovation were the two core platforms that underpinned all the discussions on shaping the future.

Throughout 2019 this work was designed to shape our long lens strategy for the next decade of growth and beyond. The Board challenged the outcomes throughout the process at separate strategy sessions and in the Board meetings. The final strategy was approved by the Board and has shaped the programme of business for the Board for 2020.

2019 Calendar

March
The Board and Executive signed off on the questions and challenges.

March to May
The Executive management developed their findings and challenged the thinking.

June
Strategy Day: Board and Executive management discussed and debated findings.

September/October
Draft 2030 plan including next 3 year financial forecast developed.

November
Strategy update: further challenge and sign off by the Board.

Our purpose
Smart Science to Improve Lives™

Our megatrends
Beauty and ageing | Health and wellbeing | Feeding world population | Sustainability

Our strategy
Personal Care – Strengthen to grow | Life Sciences – Expand to grow | Performance Technologies – Refine to grow

Our enablers
Become employer of choice | Build strong digital competence | Deliver world class customer experience | More responsive operations | Increased dynamic innovation

Board activity in 2019

There were six meetings of the Board during the year in line with the agreed programme of business. The Board agenda programme ensures strategic, operational, financial, human resources and corporate governance items are discussed at the appropriate time at Board meetings. 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. This ensures adequate time is allocated to allow effective discussion. An additional 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 three-year plan in the autumn and then the approval of the budget towards the end of the year.

Key highlights of the Board's 2019 activities and priorities are set out below, along with an estimate of the proportion of the time that the Board spent discussing each area.

Strategy (50%)

- Group strategic ambition and priorities
- Sustainability strategy and targets
- Safety, health, environment and quality – including behavioural safety, safety leadership and process safety
- Market opportunities for growth
- Product innovation programmes and technology platforms
- Consideration of various acquisition opportunities
- Digital strategy – including projects for digital marketing and e-commerce platforms
- Product manufacturing strategies
- Capital expenditure approvals
- Business presentations from all sector Presidents
- New and Protected Products pipeline
- Innovation and Research and Development metrics
- Review of Sustainability Report
- Senior management succession
- Responsible business activities

People (15%)

- Croda's purpose and developing a purpose led culture
- Succession planning
- Female talent review and mentoring scheme
- Leadership training and development
- Approval of the appointment of John Ramsay as a Director
- Extension of the term of office of Alan Ferguson
- Diversity – Board diversity policy, diversity and inclusion of our workforce and the gender pay gap reporting
- Health and safety of our employees and contractors
- All employee sharesave grants
- The Board's engagement with employees and the employee voice

Governance and reporting (10%)

- Review of Annual Report and Accounts and other financial statements
- Review of revised Remuneration Policy
- Board and Committee effectiveness evaluation
- Capital markets update
- Investor relations review
- Stakeholders and review of engagement mechanisms
- Ethical compliance programme
- Group litigation report
- Group insurance programme

Financial, risk and performance management (25%)

- Trading performance
- Review of key risks, internal and external assurance of each risk as well as risk appetite
- Preparations for Brexit, including the key risks and mitigating actions
- Dividend policy and dividend approvals
- Long term viability statement
- The Group's budget, forecasts and key performance targets and indicators
- Changes to tax legislation and a review of the Company's tax and treasury policies
- A post-implementation capital expenditure review

Standing Agenda Items

- A Health and Safety and environmental update is the first operational matter considered by the Board at each meeting
- The Group Chief Executive and Group Finance Director present reports on trading matters and financial performance
- The Group General Counsel and Company Secretary updates the Board on changes to relevant laws, regulations and governance matters

Board Visit

The Board undertook a number of site visits in September 2019 between them across the North American business. These included Salinas, Mill Hall and Atlas Point as well as undertaking discussions with customers. Sectors covered included Personal Care, Performance Technologies and Life Sciences. The Board received briefings on Health and Safety and key risks at each site before the visit and received presentations from the local management as well as meeting a wide range of employees.

Outside the boardroom

In addition to formal Board meetings, in September the Board visited a number of sites across the North American business. Several of the Directors met with customers, both large multinational and smaller customers, giving them a good understanding of how we can help create value for them and for Croda. Further details are on page 55.

The Directors also undertook one or more additional site visits. These included UK sites and others in China, Italy, Brazil and the Netherlands. They included interaction with a wide range of employees across many functions including sales, finance, marketing, R&D and HR. The Directors also received business update presentations and met with customers where possible. These visits offer an additional opportunity to discuss areas relevant to the Board and meet a wide range of managers and employees.

The Directors attended two off-site meetings to review the Group's strategy, one focusing on the long-term strategy and the other the three-year financial forecast.

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 relationships strengthen the ability of the Non-Executive Directors to constructively challenge at the Board meetings.

The Chair spends time interacting with the Chief Executive, Group Finance Director, Company Secretary and the senior management team between Board meetings. This ensures that she is kept appraised of significant developments and emerging issues and opportunities. Before most meetings the Board spend time together, which allows views to be shared and helps build relationships on a personal level. This contributes to more effective meetings and decision making.

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.

Engagement with our stakeholders

The Directors understand their responsibility to promote the success of the business in accordance with section 172 of the Companies Act 2006 (Section 172).

Effective engagement with stakeholders at Board level and throughout the business is essential to enable us to meet our Purpose, and the Board is aware that actions and decisions taken by the Company can impact our stakeholders and the communities in which we operate.

In January the Company Secretary presented refresher training on the scope and application of the obligations under Section 172. Training was also provided for those responsible for drafting Board papers and giving presentations to ensure they understood stakeholder considerations and that they were identified where appropriate in Board papers. The Chair and Company Secretary provide support and guidance at Board meetings to ensure sufficient consideration is given in Board discussions to the impact of Board decisions on stakeholder groups and these are documented where appropriate. The relevance of each stakeholder group may change depending on the issue under discussion, so the Board seeks to understand the needs and priorities of the relevant stakeholders throughout the decision process.

The Board has undertaken a key stakeholder review. The Board considers that its key stakeholders are our employees, customers, shareholders, suppliers and local communities. The Board reviewed how the Directors and the Company engaged with these key stakeholders and refined its engagement strategy in certain areas to ensure it continued to have a good understanding of their views and interests. In undertaking this review, the Board agreed which stakeholders they need to engage with directly and where they could rely on information from management. The majority of our engagement with key stakeholders is carried out by our commercial and functional business teams. The Board engages directly with shareholders, employees and customers but not directly with suppliers or local communities. Overall the Board has good mechanisms in place for engaging with all key stakeholders.

On pages 14 and 15 of our Strategic Report, we set out our principal stakeholders and how we engage with them.

Case study:

Examples of how the Board considered the interest of its key stakeholders when making decisions

The Board approved the payment of a special dividend along with a share consolidation. As well as the interests of our shareholders, the Board considered other stakeholders, including employees, suppliers, customers and debt providers and concluded that the payment of the dividend did not have a detrimental effect on these stakeholders. The interests of our pension trustees were also considered as the payment of a special dividend could have impacted the financial covenant relied on by the trustees to support the continued funding position of the pension schemes. Taking all factors into account, the Board concluded that the payment would be in the best interests of the Company to return excess capital to the shareholders.

In advance of the work commencing on the revised Remuneration Policy, the Board spent a day considering different models of remuneration and how the Policy would incentivise the appropriate behaviours from employees and delivery of our business strategy. Compliance with governance and the shareholder environment were key factors that were taken into account. As the strategy developed the Board were kept appraised, via the Remuneration Committee, of the views and outcomes of the extensive shareholder consultation that was undertaken.

How does the Board hear the stakeholder voice?

Throughout this Annual Report, we provide examples of how we engage with our stakeholders.

Stakeholder engagement

Employees

The Board recognises that the engagement of our people underpins the delivery of the Company's strategy. The Board has direct engagement during site visits, Board presentations, Board dinners and informal lunches; these events allow the Board to meet a broad spectrum of employees from differing departments including sales & marketing, R&D, SHEQ, HR, finance, operations and customer services. Engagement with employees also takes place through works councils, consultation committees, listening groups, pulse surveys and town halls.

The Board receives a quarterly update of the 'People Dashboard' which includes information about training and development, diversity and the results of exit interviews and pulse surveys conducted in the quarter. The Board also supports the opportunity for all employees to join the Sharesave scheme and become shareholders.

The Board continued to enhance its methods of engagement with the workforce during the year. Following assessment by the Board of the guidance in the 2018 UK Corporate Governance Code in relation to workforce engagement, it was decided to leverage the existing and comprehensive mechanisms that are in place to engage with our employees.

Work is underway to enhance these further by improving the flow of information up from site level to the Board and vice versa. To aid this we will be increasing the number of global pulse surveys (these are translated into 16 different languages) and also formalising the opportunities for elected employee representatives to give and receive direct feedback to and from the Board. In addition, we will be creating dedicated email addresses that colleagues can use to ask direct questions to the Board or Executive Committee about any item of interest or concern resulting from the annual report, for example strategy or remuneration.

Information on these mechanisms in relation to remuneration is on page 83 of the Remuneration Committee report.

Information on the Board interaction with employees outside the Boardroom is given on page 53. The informal interaction with employees provides useful insight into employee views.

Shareholders

Board engagement with shareholders is primarily through the Group Chief Executive and Group Finance Director. They meet regularly with the Company's institutional shareholders to discuss strategic issues and present the Company's results. Shareholder feedback is discussed with the brokers and a programme of institutional visits is undertaken. All the Directors attend the AGM.

During the course of 2019, the Remuneration Committee spent time consulting with shareholders on the revised Remuneration Policy.

The Chair, Chair of the Audit Committee and Senior Independent Director and Chair of the Remuneration Committee attended a governance lunch with a number of shareholders in June 2019.

To read about how the Board engages with shareholders, see pages 14 and 15 of the strategic report and page 56 of the governance report.

Customers

The Board engages with customers through the Group Chief Executive and receives regular information about customers in the Group Chief Executive's Board report, in other business Board reports and at the Strategy days. An exercise to map the mechanisms we have in place for customer engagement was undertaken to gain a more in depth understanding of customer views and satisfaction. The Board receives information through Board reports.

The Board met customers whenever possible when undertaking site visits. A number of customer visits were incorporated into the Board's US visit in September 2019.

See pages 14 and 15 of the strategic report for information about our stakeholders.

Local Communities

Engagement takes place locally through our local offices and sites, including via the STEM and 1% Club programmes and community consultation committees. The Board appreciates that nurturing links with these communities contributes to the long-term success of those businesses boosting local employment and business opportunities.

See pages 14 and 15 of the strategic report for information about our stakeholders.

Suppliers

We engage with our suppliers via our site and purchasing teams as well as through other functions such as SHEQ and legal. The Board receives information through Board reports. The Board recognises that these relationships can provide valuable insights and that they have a responsibility in relation to the influence they can have on the wider supply chain.

See pages 14 and 15 of the strategic report for information about our stakeholders.

Communication with shareholders

The Chair, Executive Directors and other senior managers maintain regular contact with existing and potential shareholders to ensure that our strategy and trading trends are clearly understood.

Our investor relations activity is led by the Group Finance Director, with other Directors involved as required. This includes managing the day-to-day contact with the investment community, including investors and analysts, as well as co-ordinating site visits, presentations at investor conferences and roadshows.

The Board engages in active dialogue with shareholders through the Group Chief Executive, Group Finance Director, the Chair and the Chair of the Remuneration Committee/Senior Independent Director, who regularly meet with shareholders. These meetings provide an appropriate means of capturing shareholders' opinions and the Chair ensures that the Board is regularly appraised of shareholders' views and key issues. All Non-Executive Directors are available to attend meetings if requested by shareholders and the Senior Independent Director is available to discuss matters concerning the Chair if the need arises; no such meetings were requested by shareholders during the year.

During the year, we met with almost 350 investors in the UK, North America, Europe and Asia, including face-to-face and telephone meetings and hosted site visits in several regions. We also held a capital markets seminar in London to explain opportunities in the Life Sciences business which was attended by over 80 investors and analysts.

The Board receives updates on the economic and investment environment, Croda's performance (generally and in comparison, with its sector peers) and investor reactions at Board meetings.

The Company's results presentations are webcast live, so all shareholders have access to them, and are also available to download. We answer all investor questions sent to our website.

Set out on page 57 are answers to the most commonly asked shareholder questions and a calendar of our investor events attended by senior management throughout the year.

Governance lunch

In June the Company's largest shareholders were invited to attend a lunch with the Chair, Anita Frew, Alan Ferguson (the Chair of the Audit Committee and Senior Independent Director) and Helena Ganczakowski (Chair of the Remuneration Committee).

The lunch was attended by representatives from eight shareholders who between them held 12.3% of the total issued shares in Croda at the time. Discussions focused on a range of topics, including governance, remuneration, sustainability and succession planning. The Chair reported back to the next Board meeting, where it was agreed by the Board to host a similar event in 2020.

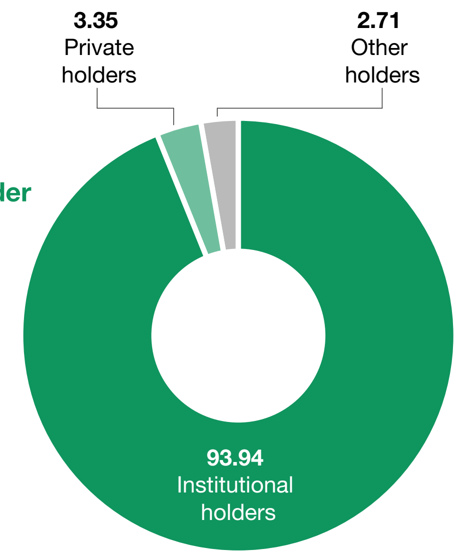
Substantial shareholders

As at the date of this Annual Report and Accounts the Company had received notification of the following material shareholdings pursuant to the Disclosure and Transparency Rules of the UK Listing Authority:

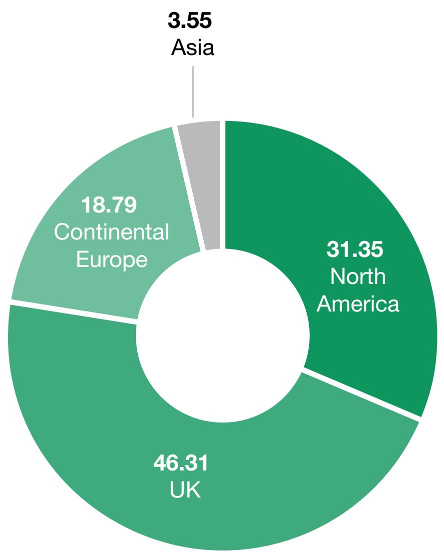
	Number of shares	% of issued capital
Massachusetts Financial Services Company	13,056,804	10.14%
Black Rock Inc	8,136,800	6.31%

Investor concentration

Percentage of issued capital by type of holder



Geographical breakdown of shareholder base



Common investor questions

1 How does the Company manage its allocation of capital?

With its strong return on invested capital, the Company seeks opportunities to expand capacity for existing products and create capacity for new innovative products through its organic capital investment programme. It also prioritises a regular ordinary dividend in line with its dividend policy. Surplus capital is either invested in inorganic expansion through acquisitions or returned to shareholders, if that capital is seen to be surplus to our medium-term requirements. Our Capital Allocation Policy is set out on p36.

2 Has the weaker sales performance in 2019 changed the Company's view of its medium-term growth opportunities?

Market conditions have been challenging in 2019 for sales growth in Personal Care and Performance Technologies. However, we do not see a change in our medium-term expectations. We are well aligned to the megatrends that will drive growth in our key markets, such as an ageing population, increasing wealth and sustainability. Our expectations are to organically grow Personal Care at low to mid single digit percentage, Life Sciences by mid to high single digit percentage and Performance Technologies at low single digit percentage. In addition, we are looking for opportunities to invest through acquisition in all three Core sectors.

3 Do you see the Company's industry leading margins as under threat?

We do not expect to see margin erosion. We are seeking to maintain Personal Care at its industry-leading margins whilst growing margin in Life Sciences to match this and improving in Performance Technologies to at least a 20% return on sales. This is helped by greater innovation, bringing new products to customers, and the fragmentation of many of our markets – for example, in Personal Care there is growth in smaller, local and 'Indie' brand companies who need a broader service from Croda, giving them help to formulate their products and comply with regulations, in addition to wanting exciting innovative ingredients.

4 What are the Company's priorities in respect of acquisition activity?

The Company looks to three areas of acquisition: nascent technologies which bring advanced research pipelines to Croda to support our in-house innovation machine; mid-scale/'bolt on' acquisitions, either in our existing or in adjacent markets with strong IP; large scale acquisitions, which bring opportunities to deliver cost and innovation synergies. There are a very limited number of large-scale opportunities, so our focus is primarily in technologies and mid-scale acquisitions.

5 How important is innovation to Croda and why does R&D spend only account for around 3% of sales?

Innovation is the lifeblood of the Company. We have a relentless innovation machine, where about 80% of the effort is focused on customer-driven requests and 20% is trend-based, focusing on developing the next new ranges of products where customer or consumer needs are not yet being met. We supplement this with advanced research acquisitions of nascent technologies which we can develop and scale up. We also have a very successful Open Innovation programme, giving us access to over 500 universities and SMEs. One of our key measures of successful innovation is NPP and our aim is to grow NPP at twice the non-NPP sales growth rate (p32)

Our investor calendar

Set out below is a calendar of our investor events attended by senior management in 2019.

January	• Close Period
February	• Full year results announced • Roadshows in London
March	• Roadshows in New York • Conferences in London and New York
April	• Annual General Meeting in Harrogate • Roadshows in Boston and Toronto • Investor site visits in the UK
May	• Roadshows in Chicago, Frankfurt and Edinburgh • Conferences in London and New York • Investor site visits in UK
June	• Roadshows in London, Paris, Hong Kong and Singapore • Conferences in London and Paris • Investor field trips in France
July	• Half-year results announced in London • Roadshow in London
August – September	• Conferences in London
October	• Life Sciences Capital Markets Day • Roadshows in US Mid-West, Oslo and Copenhagen • Investor site visit in Shanghai
November	• Conferences in London, • Roadshows in Toronto and Singapore
December	• Conferences in London • Investor site visits in UK

Annual General Meeting (AGM)

The AGM provides an opportunity for private shareholders to raise questions with Board members. The Directors are also available to answer questions afterwards, in an informal setting. The Annual Report and Accounts, including the notice of AGM, are sent to shareholders at least 20 working days before the meeting. There is a separate investor relations section on www.croda.com that includes, amongst other items, presentations made to analysts. This year, the AGM will be held at the Pavilions of Harrogate on 23 April 2020 at 12 noon.

Deadlines for exercising voting rights

Votes are exercisable at a General Meeting of the Company in respect of which the business being voted upon is being heard. Votes may be exercised in person, by proxy or, in relation to corporate members, by corporate representatives. The Company's Articles of Association provide a deadline for submission of proxy forms of not less than 48 hours before the time appointed for the holding of a meeting or adjourned meeting.

Division of Responsibilities

Board roles

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. She maintains high standards of corporate governance and is responsible with the Board for understanding the views of all key stakeholders and ensuring they are considered in decision making. The Chair leads the annual Board effectiveness review process and ensures that new Directors have an appropriately tailored induction process.

Group Chief Executive

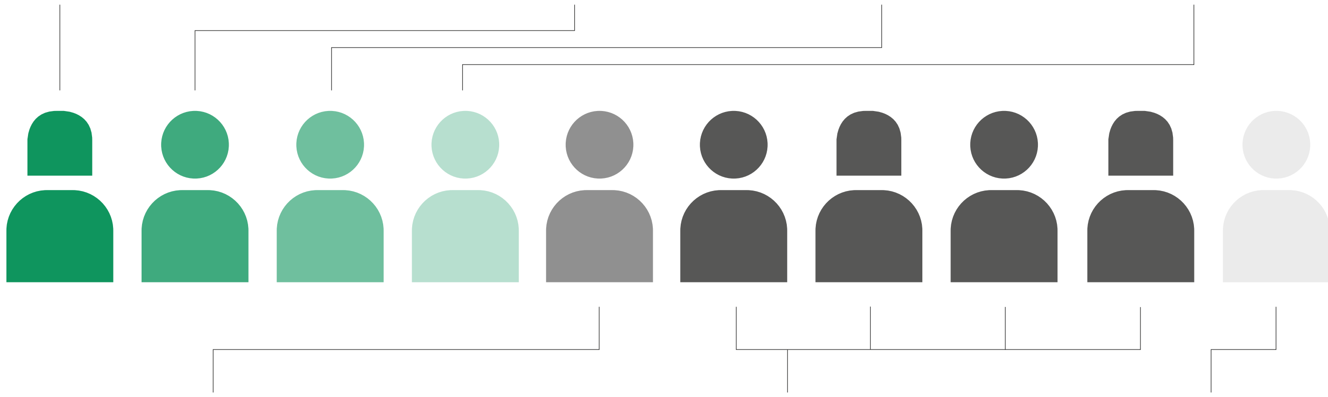
The Group Chief Executive has day-to-day responsibility for the effective management of the Group's business and for ensuring that Board decisions are implemented. He plays a key role in devising and reviewing Group strategies for discussion and approval by the Board. The Group Chief Executive is tasked with providing regular reports to the Board on all matters of significance relating to the Group's business, or reputation, to ensure that the Board has accurate, timely and clear information on all matters.

Group Finance Director

The role of Group Finance Director is to bring a commercial and financial perspective to the Boardroom. Working with the 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 and ensures effective reporting procedures and controls are in place.

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. He is available to shareholders where communication through the Chair or Executive Directors has not been successful or where it may not seem appropriate. The Senior Independent Director is responsible for leading the Non-Executive Directors in appraising the performance of the Chair and in their discussions of her term of appointment and fees.



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. With appropriate management of conflicts, Keith can constructively challenge the Executive Directors and scrutinise the performance of management in meeting agreed goals and objectives which adds an extra layer of challenge to that of the independent Non-Executive Directors.

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. They help develop and monitor the delivery of the strategy within the risk and control framework set by the Board. They determine appropriate levels of remuneration for Executive Directors and have a prime role in succession planning and the appointment and, where necessary, the removal of Executive Directors.

Group General Counsel and Company Secretary

The Group General Counsel and Company Secretary is secretary to the Board and its Committees. He ensures that Board procedures are complied with and advises on regulatory compliance and corporate governance. This role is to support the Chair and the Non-Executive Directors. In addition, he develops Board and Committee agendas and collates and distributes meeting papers. He facilitates induction programmes for new Directors and provides briefings on governance, legal and regulatory matters.

Governance structure

The Board has three main Committees: the Audit Committee, the Remuneration Committee and the Nomination 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 Routine Business Committee.

Information on the Committees as at the year end is below. Further information on each of the Committees and the membership as at the date of this report is shown on page 70.

Group Board

Chaired by Anita Frew

Principal Board Committees

Audit Committee

Chaired by Alan Ferguson
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 65 to 69.

Remuneration Committee

Chaired by Helena Ganczakowski
Recommends the Company's remuneration policy and framework and determines the remuneration packages for members of senior management. For more information see pages 71 to 97.

Nomination Committee

Chaired by Anita Frew
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 61 to 63.

Group Chief Executive

Group Executive Committee	Group Finance Committee	Risk Management Committee	Group SHEQ Steering Committee	Group Ethics Committee	Routine Business Committee
Chaired by Steve Foots	Chaired by Steve Foots	Chaired by Jez Maiden	Chaired by Mark Robinson	Chaired by Tom Brophy	Chaired by Steve Foots or Jez Maiden

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.

Training and briefings are available to all Directors taking into account their existing experience, qualifications and skills. 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. As well as planned training on governance, legal and regulatory matters, the programme is sufficiently flexible to capture new and emerging regulation, development stemming from evaluation and specific training requests from Directors. Each Director's training programme includes the same online training on competition law and anti-bribery and corruption as taken by managers and selected employees across the Business.

Before each Board meeting, the Company Secretary makes sure that the meeting papers are made available electronically one week in advance, which ensures that each Director has the time and resources to fulfil his/her duties. Directors have the opportunity to raise questions stemming from the papers prior to the meeting, should they wish to do so. 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.

Directors' induction

Upon joining Croda, Directors receive a tailored induction programme. This includes site visits, meetings with key advisers and the opportunity to engage with a wide variety of employees across all functions and seniorities. John Ramsay is undergoing his induction following his appointment to the Board on 1 January 2020. Our tailored inductions offer a swift and thorough way to help Directors understand our business, markets, culture and relationships and to establish a link with employees.

Board performance

The Board undertakes a formal review of its performance and that of its Committees each year. The 2017 review was conducted by EgonZehnder, an external board review specialist. This year we conducted the review using an online questionnaire tailored to Croda's activities and current concerns. Separate questionnaires were also used for the Audit, Remuneration and Nomination Committees. A report was prepared based on the completed questionnaires, which facilitated an evaluation of the effectiveness of the Board and its Committees and the support and information received from management and advisers. The results were discussed in detail by the Board, with facilitation by the Chair and the Company Secretary.

The Board's composition was considered appropriate and their knowledge of investors and customers was highly rated. Engagement and challenge in the boardroom was strong and the Board meetings are well led by the Chair who facilitated equal contribution and candid discussion. The agendas were balanced and in line with the strategic priorities. Consideration of culture was embedded in the Board discussions. Areas for focus and opportunities for 2020 were agreed by the Board, see page 49.

Board re-election

The Board has a broad range of skills and experience from different industries, advisory roles and from international markets.

These skills support the strategic aims of the Company. Following individual performance assessments, the Board is satisfied that each Director continues to perform effectively, allocates sufficient time for his/her duties and remains fully committed to his/her role. With the exception of Alan Ferguson, all Directors will stand for re-election/election at the 2020 AGM. Full biographies for the Directors are on pages 46 and 47.

Time commitment

Each Director is aware of the need to allocate sufficient time to the Company to discharge his/her responsibilities effectively. This is reviewed annually by the Nomination Committee. In addition to time spent at Board and Committee meetings, the Directors participate in several Company related events; details are set out on page 54 and 55.

Independence of Non-Executive Directors

Croda complies with the Financial Reporting Council's Reporting Code (the Code) in having experienced Non-Executive Directors who represent a source of strong advice, judgement and challenge to the Executive Directors. At present there are seven such Directors, including the Chair and the Senior Independent Director, each of whom has significant commercial experience. Their understanding of the Group's operations is enhanced by regular business presentations and site visits.

The independence of the Non-Executive Directors is kept under review. The Chair was independent upon her appointment in 2015 but, as Chair, is not classified as independent. 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.

Nomination Committee

Report of the Nomination Committee
for the year ended
31 December 2019

"The Committee continued to maintain its focus on succession planning, to ensure we have the strongest leadership to deliver the Company's strategy."

Anita Frew
Chair of the Nomination Committee

Members and attendance (eligibility) at meetings held during the year ended 31 December 2019

Alan Ferguson Independent Non-Executive	4(4)
Helena Ganczakowski Independent Non-Executive	4(4)
Keith Layden Non-Executive	4(4)
Steve Williams Independent Non-Executive	2(2)
Roberto Cirillo Independent Non-Executive	4(4)
Jacqui Ferguson Independent Non-Executive	4(4)

Steve Williams retired from the Board on 24 April 2019.

John Ramsay was appointed to the Board as an Independent Non-Executive Director on 1 January 2020.

Dear fellow shareholder

I am pleased to present the Nomination Committee report for the year ended December 2019.

Main activities and priorities in 2019

Board changes and succession planning

During the year the Committee continued to maintain its focus on succession planning and talent development across all levels of leadership, to ensure we have the strongest leadership to deliver the Company's strategy.

The Committee carried out a review of the size and composition of the Board and the collective skills and experiences of the Directors, aided by the results of the Board evaluation.

The results of this review recognised the need for a new Audit Committee Chair given that Alan Ferguson is due to step down from the Board in April 2020 having served nine years as a Director. The review also highlighted that strengthening the Board's knowledge of digital technology and experience in emerging markets would also be beneficial to the Board in the coming years.

The Committee used the output from the skills review to provide focus for the recruitment for Alan's replacement. Further details of the recruitment process is detailed below. Following the search, the Committee recommended to the Board that John Ramsay be appointed as Alan's successor. John was appointed to the Board on 1 January 2020 and will become Audit Committee Chairman on 23 April 2020 when Alan steps down and Helena Ganczakowski becomes Senior Independent Director.

Following the external assessment of the Executive Committee in 2018, during the year the Committee reviewed the development plans for each member of the Executive Committee and will continue to review the progress of these development plans over the coming year.

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.

Detailed responsibilities are set out in the Committee's terms of reference, which can be found at www.croda.com.

Diversity

The Committee considers that diversity on the Board and throughout the Company has a positive effect on the quality of decision making. Diversity training has been incorporated into our management development programmes and we have established a global Diversity and Inclusion Committee to promote and inform improved diversity across our business.

Our Board Diversity Policy reflects our commitment to maintain the current 33% female membership and our aspiration to move towards a gender balanced Board. We are also setting new targets to double the number of women in leadership positions by 2025 and to achieve gender balanced shortlists for 80% of our roles by 2023. It also reflects our commitment to diversity in all other forms, including ethnic diversity. This policy will continue to guide our future appointments. We will do this by ensuring that the specification for any new Director role is equally suited to applicants of any gender and that no discrimination occurs at any stage in the selection process on any applicant characteristic.

In November 2019, we appointed Tracy Sheedy, Group HR Director, to our Executive Committee.

A copy of our Board Diversity Policy, which is regularly reviewed by the Board, is available at www.croda.com. For more information on our Board diversity see Governance at a Glance on page 48.

Appointment of John Ramsay

The Committee reviewed the collective skills and experiences of the current Directors in January 2019. This was updated to include the information on our new Non-Executive Directors Roberto Cirillo and Jacqui Ferguson and taking into account the retirement of Steve Williams (retired April 2019) and Alan Ferguson (retiring April 2020).

It was agreed that the key area for succession would be the Audit Committee Chair.

The Chair and Company Secretary prepared a high-level specification that was agreed by the Committee and formed part of the candidate brief to the executive search consultancy firm. A key requirement for the search were for candidates to have relevant financial experience as a CFO in a FTSE 100 or 250 company (or equivalent) and previous Audit Committee experience. In addition, taking account of the skills review undertaken by the Committee, the search firm were asked to identify candidates with experience in emerging markets, the chemical industry, health and safety focused businesses and business models subject to fast paced change. The Committee also ensured that the candidate shortlists were balanced in terms of gender nationality and ethnic origin.

The Chair and Messrs Ferguson, Maiden, Brophy and Dr Ganczakowski undertook the first stage of the search, with other members of the Committee and the Executive Directors meeting with the short list following a review of the respective skills, experience and fit of each candidate.

References were taken and the Committee made a final recommendation to the Board.

John Ramsay was appointed from 1 January 2020. His biography can be found on page 47.

A key objective continues to be to encourage and monitor the development of talented employees. We continued to focus on increasing the diversity of our leaders, particularly focusing on gender and nationality. The Committee received periodic updates from the Group HR Director on the learning and development of high potential individuals. Colleagues below Executive Committee level attend and present at Board meetings and the Board meets a wide range of employees when undertaking site visits. We have established a mentoring programme for some of our highest potential employees who are on Executive Committee succession plans. We have ensured that there is good balance between males and females. The mentees are matched with mentors from the Board and Executive Committee and training has been provided for all participants. A key objective for the mentoring programme is to provide role models and development opportunities for mentees and to aid in the creation of a more diverse organisation. We continue to promote flexible working and 'female friendly' job adverts and gender balanced shortlists in our recruitment processes.

Routine business

Annually the Committee reviews the time commitment of the Non-Executive Directors. It was satisfied that all the Non-Executive Directors remain able to commit the required time for the proper performance of their duties. They also 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.

Anita Frew
Chair of the Nomination Committee

Looking ahead to 2020

In addition to our routine business, during the year the Committee will:

- Monitor the progress of the Board mentoring programme
- Review the Executive Committee individual development plans
- Continue to consider the effectiveness of diversity activities across the Group

I will be available at the AGM to respond to any questions shareholders may raise on the Committee's activities.

Audit, risk and internal control

The Audit Committee

The Audit Committee's report, which describes the membership of the Audit Committee, its responsibilities, main activities in 2019 and priorities for 2020, is set out on pages 65 to 69.

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 (FRC's) Guidance on Risk Management, Internal Control and Related Financial Business Reporting 2014, and in the Corporate Governance Code itself, an ongoing process has been established for identifying, evaluating and managing the principal risks faced by the Group (p 38). The Directors have established an organisational structure with clear operating procedures, lines of responsibility and delegated authority.

In particular, there are clear procedures and defined authorities for:

- Financial reporting, with clear policies and procedures governing the financial reporting process and preparation of the financial statements. There is a clear and documented framework of required controls. Each reporting location prepares an annual self assessment of compliance with these controls, which is assured during planned internal audit visits
- Comprehensive monitoring and quantification of business risks, under the direction of the Risk Management Committee. The Group's approach to risk management and the principal risks facing the Group are discussed in more detail in the Strategic Report on pages 38 to 42
- Capital investment with detailed appraisal, risk analysis, authorisation and post-investment review procedures

This process has been in place for the full financial year and up to the date on which the financial statements were approved by the Directors.

The Board discharged its responsibility for monitoring the operational effectiveness of the internal control and risk management systems throughout the financial year and up to the date of approval of the Annual Report and Accounts. It used a process which involved:

- Written confirmations from relevant senior executives and divisional directors concerning the operation of those elements of the system for which they are responsible
- Internal audit work, which reports through the Vice President of Risk and Assurance to the Audit Committee
- Reports from the external auditors
- Presentations of key risks and controls by the Executive owner and other assurance providers
- Annual report on control weaknesses from the Vice President of Risk and Assurance.

This system is designed to mitigate, rather than eliminate, the risk of failure to achieve business objectives and provides reasonable, but not absolute, assurance against material misstatement or loss. As appropriate, the Board also ensures that necessary actions have been, or are being, taken to remedy failings or weaknesses identified from the review of internal controls' effectiveness and judges their level of significance.

Fair, balanced and understandable

The process of compiling the Annual Report and Accounts starts early enough to give the Board time to assess whether it is fair, balanced and understandable, as required by the Code. 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 tone was reviewed to ensure a balanced approach and the Board made sure the narrative at the front end of the Annual Report was consistent with the financial statements. See page 101 for the statement of Directors' responsibilities.

Non-financial information statement

The table below sets out where more information can be found in our Strategic Report that relates to non-financial matters, as required under the Non-Financial Reporting Directive.

Reporting requirement	Some of our relevant policies	Where to read more about our impact	Page	Key risks relating to these matters
Environmental matters	Group SHE policy[1]	Environmental stewardship Risk Management	31 41	Major safety or environmental incident
Employees	Group Code of Ethics[2] Group Code of Conduct[1] Group SHE policy[1] Group Policy on Training and Development[2]	Our stakeholders People Positive Risk Management	14 30 41	Talent development and retention Major safety or environmental incident
Human rights	Group Policy on Discrimination[2]	People Positive Living Wage	30 88	Talent Development and Retention
Social matters	Group Policy for Managing Diversity[2]	People Positive	30	Ethics and compliance Talent Development and Retention
Anti-bribery and corruption	Croda Modern Slavery Statement[2] Competition Law Policy[1] Croda Fraud Policy[1] Whistleblowing Group Policy Procedures[2] Global Risk Framework Policy[1]	Risk Management Responsible Business	42 31	Ethics and compliance
Business model (Engage, create, make and sell speciality chemical ingredients)	Global Risk Framework Policy[1]	Business Model	12	All key risks on pages 38 to 42 link to our business model
Non-financial KPIs (Environmental, social and ethical relating to our operations and the ingredients we make)	Group SHE policy[1] Our Purpose	Key Performance Indicators Sustainability	32 29	Major safety or environmental incident

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

Audit Committee

Report of the Audit Committee
for the year ended
31 December 2019

"After the AGM I shall retire from the Committee and Board and John Ramsay will become Chair of the Committee."

Alan Ferguson
Chair of the Audit Committee

Dear fellow shareholder

As Chair of the Audit Committee, I am pleased to present the Audit Committee report for the year ended 31 December 2019, which provides detail of the activities carried out by the Committee during the year.

Committee membership

The Committee consists of five Non-Executive Directors. The experience of each member of the Committee is summarised on pages 46 and 47. I have held a number of senior finance director roles and I also Chair the Audit Committees of another FTSE 100 company and an AIM listed company. The Board considers each member of the Committee is independent within the definition of the Code, has relevant financial experience, as well as a broad and diverse spread of commercial experience, including competence in operating within the chemical industry. Such consideration provides the Board with assurance that the Committee has the appropriate skills, breadth and depth to ensure that it can be fully effective, and that it meets the Code requirements that at least one member has significant, recent and relevant financial experience and that the Committee as a whole is competent in the sector in which the Company operates.

Members and attendance (eligibility) at meetings held during the year ended 31 December 2019

Alan Ferguson	
Chairman	5 (5)
Roberto Cirillo	
Independent Non-Executive	5 (5)
Jacqui Ferguson	
Independent Non-Executive	5 (5)
Helena Ganczakowski	
Independent Non-Executive	5 (5)
Steve Williams	
Independent Non-Executive	3 (3)

Steve Williams retired from the Board on 24 April 2019. In addition to the meetings during 2019, there were two meetings held subsequent to the year end, with full attendance at both. John Ramsay attended both meetings as a member of the Committee.

The Chair of the Board, Keith Layden (a Non-Executive Director), the Group Chief Executive, the Group Finance Director, the Group Financial Controller, the Vice President of Risk and Assurance, who leads the internal audit function, and representatives from the external and internal auditors attend the meetings by invitation.

The Committee periodically, and I more regularly, meet or speak separately with the Vice President of Risk and Assurance and the external auditors without the Executives being present. While these discussions are invaluable, I also meet with the external auditors, the Group Finance Director and the Group Financial Controller at least twice each year to discuss the detail of the year end and half year results before the relevant Committee meetings. This helps me to better understand the key issues and to make sure enough time is devoted to them at the subsequent meeting.

After the AGM on 23 April 2020, I shall retire from the Committee and the Board having served nine years as a Non-Executive director. John Ramsay, who joined the Board as a Non-Executive director on 1 January 2020, will become Chair of the Committee. John has a wealth of financial, international and sector experience and he has a strong background as an Audit Committee Chair. His full biography can be found on page 47.

I would like to thank the members of the Committee, the executive management team and the external and internal audit teams for their commitment and significant contributions to the work of the Committee over the past year and during my nine-year tenure as Chair of the Committee. It has been a privilege to work with them all.

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.

In addition to its business as usual activities, the Committee selects certain focus areas each year for detailed review.

Detailed responsibilities are set out in the Committee's terms of reference, which can be found at www.croda.com

Main (business as usual) activities of the Committee since the publication of the 2018 Annual Report and Accounts

The Committee met three times in 2019 after publication of the 2018 Annual Report and Accounts and twice between the year end and the publication of this Annual Report. The key issues covered at the Committee meetings were reported at the subsequent Board meeting.

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:

Committee activity in 2019

Financial reporting (20%)

The Committee:

- Monitored the Group's financial statements and results announcements, and reviewed significant financial reporting and accounting issues including alternate performance measures, the going concern assessment and exceptional items.
- In conjunction with the Board, reviewed the financial modelling and stress testing based on plausible scenarios arising from selected key risks, noting the effect they would have during the viability period.
- Undertook regular reviews of the Group's material litigation and was satisfied with the approach to provisioning and disclosure.
- Received updates on the progress of the Global Finance Standardisation project.

Governance (20%)

The Committee:

- Reviewed a compliance checklist to ensure the Committee met its corporate governance and regulatory requirements.
- 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.
- Received presentations from senior members of the finance team, including the Finance Directors of Latin America and Personal Care (who is also responsible for North America) and the Group Financial Controller (who is also the Finance Director of Life Sciences).
- Undertook an effectiveness review, which included reviewing the results from a questionnaire, and concluded that the Committee was operating effectively.
- Responded to the BEIS consultation on the Competition and Markets Authority's recommendations on the audit market.
- Reviewed its 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.
- Completed its annual review of the Group's tax strategy (which can be found on our website) and risks.

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 materiality level and the de minimus reporting threshold; the coordination between internal and external audits; and the key members of the engagement team. Approved the audit fee.
- Reviewed compliance with the FRC's Revised Ethical Standard for auditors and the restrictions on auditors to provide non-audit services and as a result revised the non-audit services policy.
- Met with the external auditors without management present.
- Discussed the actions taken to date by KPMG to improve audit quality across the firm in support of the Committee's annual assessment of the quality of the external audit.
- Considered and confirmed the independence of KPMG, as further described on page 69.
- Considered the effectiveness of the external audit process and in light of the findings recommended the re-appointment of KPMG at the AGM.

Internal audit and risk management (25%)

The Committee:

- Received a report from the Vice President Risk and Assurance at each meeting and monitored compliance with the Group risk management programme. The Committee reviewed the reliance placed by management on the risk mitigating controls of the Group's highest risks and analysed the types of assurance, both internal and external, that applied to these controls.
- Assessed the 2019 risk assurance activity carried out by internal audit with reference to the Group's principal risks, which included a review of: the ethics framework, business resilience in the event of significant loss of SAP, and consideration of employee salaries in China and India against living wage criteria.
- Discussed the increased use of data analytics and process mining in 2019, which enabled further comparison between sites to highlight potential opportunities to share best practice and leverage our SAP investment.
- Considered the results of the 2019 controls assurance internal audits and the IT audits, the self-assessment process, the adequacy of management's response to matters raised and the time taken to resolve such matters.
- Reviewed and approved the 2020 internal audit plan and supported the continuation of the review on digital strategy and systems and the global supply chain initiatives.
- Met with the internal auditors without management present.
- Conducted its annual review of the Group's internal auditor (see page 68).

Key focus areas for 2019 (10%)

As highlighted above, the Audit Committee has delivered on our 'business as usual' work, as set out in our terms of reference. Last year, we noted three focus areas for 2019, which absorbed the balance of the Committee's time.

Key focus area	Actions during the year	Progress
Continue to review the implementation of our Data Privacy policies and procedures globally	Internal audit attend the Data Privacy steering group which oversees the continued roll out of the programme globally. The number of data privacy controls in the self-assessment questionnaire was increased from four to twelve in 2019. All sites globally complete these questionnaires. These questions served the dual purpose of assessing data privacy status irrespective of local regulatory requirements and of reminding sites of Croda's expectations in this area. All self-assessed data privacy controls were in scope for review and follow up during site audits. The Committee discussed the findings from these reviews.	Completed
Consider the implications of the Group's digital strategy on cyber security risk	Cyber security risk over key applications and networks is assessed annually as part of the general IT controls assurance work and self-assessment process. As applications are added or are identified as more critical when viewed through the digital strategy lens, these fall naturally into the assurance scope. The Committee also discussed a paper presented by the Chief Digital Officer on progress against the digital strategy and data management. The full risk review of the digital strategy (including the implications on cyber security) has been rescheduled to 2020 when the delivery of the strategy will be more advanced. All Committee members attended a Board Cyber Security teach in. With the Committee's direction, internal audit undertook a detailed review of business resilience in the event of significant SAP downtime.	Ongoing
Review in detail the HR system implementation planned for 2019	As the full implementation of all modules of the new HR system was delayed, with completion now expected in 2020, the Committee agreed that this risk assurance review would be postponed.	Ongoing

Significant financial statement reporting items

The Committee, with support from the external auditors, reviewed those items in the Group's financial statements which 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.

Goodwill: The strategy of the Group includes acquiring new technologies and businesses operating in adjacent markets. Goodwill represents a significant asset value on the balance sheet (£348.5m out of total net assets of £868.6m at 31 December 2019).

The Committee completed its annual impairment review of the carrying value of goodwill, as prepared by management, including the sensitivity to a number of underlying assumptions. After challenge, the Committee was satisfied that the assumptions were reasonable, no impairments were necessary, and that the disclosure, which was increased again this year, was appropriate.

Provisions: The Committee reviewed whether certain environmental, restructuring, litigation and other legal provisions were sufficient to cover estimated costs of potential and actual claims and decided that they were reasonable and appropriate.

Enquiries were made with lawyers and third-party experts as well as the in-house legal team. The Committee was reassured by legal opinions and the insurance coverage in place. The contingent liability note was also reviewed.

Recoverability of parent Company's intercompany receivables: The Committee considered the recoverability of parent Company's intercompany receivables of £1,589.6m (2018: £1,675.4m), which represents 72.3% of the parent Company's total assets (2018: 73.6%). 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 or profitability. After review, the Committee was satisfied that the recoverability of the intercompany receivables 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. The Committee looked at recurring themes where issues were identified across a number of locations; these will help inform the scope of the work undertaken in the 2020 audit plan. The programme of 'Croda peer reviews' continued to be implemented within each region as part of the internal audit plan, under the direction of the Vice President Risk and Assurance, reporting back to the Audit Committee. This approach ensured that the internal audit resource added the greatest value to the internal control environment by focusing in the right areas.

In January, the Committee conducted its annual review of the internal auditor, including their approach to audit planning and risk assessment, communication within the business and with the Committee and its relationship with the external auditors. It also examined the progress being made in developing the Digital Hive which pulls together amongst other things, controls assessments, assurance outcomes, action management and reporting into a single system. Senior management feedback from sites included in the 2019 audit programme is gathered by questionnaire to support this process. These did not highlight any significant areas for development. The Committee was pleased with progress, with notable benefits being seen around data analytics, the Digital Hive and the benefits of internal audit sharing best practice across the Group.

Details on how the Business implements its risk management framework and monitors controls on a Group-wide basis are set out on pages 38 to 42.

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, the additional insights provided by the audit team, particularly at partner level, and their reviews on areas such as NPP and segmental reporting. 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 their knowledge and understanding of the business. The Committee also considered how well the auditors assessed key accounting and audit judgements and the way they applied constructive challenge and professional scepticism in dealing with management.

This year the Committee requested information from KPMG detailing the work of the Engagement Quality Control Review partner and the other "second line of defence" quality control processes that sit behind the audit team. The Committee reviewed this information and was pleased with the insight this gave on audit quality.

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 2019 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.

We reviewed the FRC's 2018/2019 Audit Quality Inspection report of KPMG UK. The actions taken to date by KPMG UK to improve audit quality across the firm, which started to be implemented in 2017, led to an improvement in performance for this year. This is a long-term commitment and will be monitored by the Committee on an ongoing basis. The main areas identified by the FRC for further improvement were discussed by the Committee with a focus on the remedial actions being taken.

Following the review, the Committee concluded that the audit was effective and overall the Committee was pleased with the performance of KPMG.

External audit tendering

We are 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 to 31 December 2018.

External auditors' 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. During the year, the Committee undertook a detailed review of the provision of non-audit services by KPMG and compliance with the FRC's Revised Ethical Standard for auditors and as a result updated our policy in this regard. KPMG already had a policy which was compliant with the FRC's Revised Ethical Standard for auditors. They have not been required to terminate any services that would not be permissible under the Standard.

In 2019, non-audit fees were £0.1m, significantly less than the total audit fees of £1.0m; 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.

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 AGM to respond to any questions shareholders may raise on the Committee's activities in the year.

Alan Ferguson
Chair of the Audit Committee

Looking ahead to 2020

In addition to our routine business, the Committee has three focus areas for 2020. We will:

- Maintain our ongoing focus on Cyber Security
- Continue to evaluate the maturity and security of the approach to digital development (including the implementation of global digital transformation projects)
- Review in detail the HR system implementation

Other Committees

The 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. These Committees and their membership at the date of the Annual Report and Accounts are shown in the table below.

Group Executive Committee

The Committee meets eleven times a year 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.

Group Finance Committee

The Committee meets every month to review monthly operating results and examine capital expenditure projects.

Risk Management Committee

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.

Group SHEQ Steering Committee

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.

Group Ethics Committee

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.

Routine Business Committee

The Committee comprises the Group Chief Executive and Group Finance Director, with the Group General Counsel and Company Secretary and Group Financial Controller acting as alternates. The Committee attends to business of a routine nature and to the administration of certain matters, the principles of which have been agreed by the Board or the Group Executive Committee.

Committee membership (as at the date of this report)

		Group Executive Committee	Group Finance Committee	Risk Management Committee	Group SHEQ Steering Committee	Group Ethics Committee	Routine Business Committee
Steve Foots	Group Chief Executive	✓ (Chair)	✓ (Chair)		✓ (Member)		✓ (Chair)
Stuart Arnott	President Sustainability	✓ (Member)				✓ (Member)	
Sandra Breene	President Personal Care	✓ (Member)		✓ (Member)			
Tom Brophy	Group General Counsel, Company Secretary and MD Western Europe	✓ (Member)		✓ (Member)		✓ (Chair)	✓ (Member)
Nick Challoner	President Life Sciences	✓ (Member)			✓ (Member)	✓ (Member)	
Anthony Fitzpatrick	President Corporate Development	✓ (Member)			✓ (Member)	✓ (Member)	
Maarten Heybroek	President Performance Technologies & Industrial Chemicals	✓ (Member)			✓ (Member)		
Jez Maiden	Group Finance Director	✓ (Member)	✓ (Member)	✓ (Chair)			✓ (Chair)
Tracy Sheedy	Group HR Director	✓ (Member)				✓ (Member)	
Ritesh Tanna	Group Financial Controller		✓ (Member)	✓ (Member)			✓ (Member)
Mark Robinson	Vice President Global Sustainable Operations		✓ (Member)		✓ (Chair)	✓ (Member)	
Hazel Whitaker	Vice President Risk & Assurance			✓ (Member)	✓ (Member)	✓ (Member)	

Chair   Member

Directors' Remuneration Report

Report of the Remuneration Committee
for the year ended 31 December 2019

"Going forward, we will continue to seek out opportunities to develop and enhance the remuneration approach at Croda. We remain committed to ensuring that our remuneration policies reflect the evolving needs and expectations of our shareholders, stakeholders and the societies in which we operate."

Dr Helena Ganczakowski
Chair of the Remuneration Committee

A. Chair's letter

On behalf of the Board and the Remuneration Committee, I am pleased to present Croda's updated Remuneration Policy and the Director's Remuneration Report for the year ended 31 December 2019.

Over the past eight years, under Steve Foots' leadership, Croda has matured and developed as a global business; putting in place a strong foundation of structures, processes and capabilities to enable it to compete ever more effectively on the world stage. As the business enters its next strategic phase so the ambition level will increase, and more will be demanded from our senior team.

We strongly believe that reward should be aligned to Company performance and the delivery of our strategy. The Committee believes that Croda's remuneration approach plays a key role in the achievement of the Group's strategic ambition and in the delivery of sustainable, profitable growth. This year's Policy review gives us the opportunity to update and ensure alignment of both the Policy and its application to the delivery of Croda's evolving ambition.

Throughout the review we have also been mindful of new governance expectations, and shareholder sentiment, particularly in the area of alignment of executive pensions with the wider workforce.

Through the course of 2019 we have spent time consulting with shareholders and are very grateful for their continued support and engagement. As you will see in this Report and our updated Policy, we have responded in a number of areas, ensuring that our remuneration approach reflects the developing needs of all of our stakeholders.

Alignment to strategic objectives

Whilst Croda's strategy is evolving, the focus remains consistently on driving sustainable, profitable growth by meeting our customers' needs through innovation and thus delivering our Purpose: Smart Science to Improve Lives™. This sense of purpose aligns with our business culture which we believe to be a strong driver of performance. In updating and operating our Remuneration Policy we have paid close attention to all these factors.

Delivering sustainable, profitable growth is directly reflected in our performance measures and stretching targets. The Annual Bonus 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), we are proposing that 35% of the award is based on Earnings per Share (EPS) growth and 35% is based on relative Total Shareholder Return (TSR) performance amongst a bespoke group of our most relevant competitors.

Sustainability has always been key for Croda; we are industry leaders in providing sustainable solutions for our customers and innovation in sustainable products is central to our long-term growth. To that end, we have developed a range of ambitious long-term sustainability targets and will be incorporating selected elements of these into the PSP metrics each year. For 2020 10% of the PSP award will be focused on these new metrics and 20% will continue to be focused on our innovation metric, New and Protected Products (NPP), i.e. products that will sustainably drive our future growth.

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 and safety is a key metric of particular focus in this review.

Alignment of Executive reward with the wider workforce

In line with our "One Croda" culture, our senior leaders all share the same performance metrics for the global Annual Bonus Plan and PSP. Around 400 employees participate in the Annual Bonus Plan and 60 of these also participate 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.

Pay for all employees is set in line with the market and closely monitored, and local bonus schemes are available for those below senior leader level in most regions. Around 84% of our UK workforce and 61% globally participate in share plans and therefore benefit from the rewards enjoyed by all shareholders.

In addition, we are proud to be one of only two FTSE 100 companies with a career average defined benefit pension scheme that is open to all new and existing employees. Our pension scheme is a generous and inclusive benefit for our UK workforce. An important part of the value to employees is that the level of pension is guaranteed up to the cap, as the Company bears all the investment risk. This security for our workforce is an important part of our 'One Croda' culture.

Remuneration Policy Review

We feel that the Remuneration Policy has served us well, but in the light of Croda's evolving strategy and shareholder feedback, we are proposing some updates to the Policy going forward, in the areas of pension, PSP metrics and quantum, and shareholding guidelines.

- Effective 1 January 2020 we have implemented a reduction in the pension cash supplement for the CEO and GFD from 25% to 20%, aligning all recipients of pension cash supplements at 20% across the whole UK workforce.

  Our defined benefit pension scheme is open to all employees in the UK up to a salary cap and is highly valued as the level of pension is guaranteed by the Company. As well as the security this provides, we estimate that the value of this benefit comfortably exceeds 20% of salary, based on current market values for savings and annuities. We are therefore confident that our proposed Executive Director pension arrangements are aligned to, or lower than, our wider UK workforce arrangements.
- As mentioned earlier, our increased focus on sustainability in Croda's evolving strategy has led to the proposed introduction of a set of sustainability metrics into the PSP. Our NPP metric will be incorporated into this set.

  To reinforce the importance of Return on Invested Capital, going forward, we will also be introducing a new Economic Value Added (EVA) underpin which will apply across the whole of the PSP award. This underpin would be based on an improvement in EVA over the three-year PSP performance period.
- Since the CEO's appointment in 2012 Croda has consistently outperformed the FTSE with significant long-term growth across all KPIs. Croda is now an established international FTSE 100 company, but executive reward has not kept pace with the increased scope and growth of the business. We therefore propose increasing maximum potential PSP for the CEO from 200% to 225% and for the GFD from 150% to 175%.

  In considering this change the Committee was conscious that any increase in total compensation should be focused on the delivery of long-term performance. Following the increase, total compensation will still remain in the lower quartile amongst FTSE 100 industrials.
- It is proposed that shareholding guidelines for the CEO and GFD increase in line with the increase in quantum proposed above. In addition, we propose the introduction of post-employment shareholding guidelines over two years; set at 100% for the first year after leaving employment and tapering to 0% by the end of year two.

We believe that these changes are aligned to strategy and respond to the needs of all our stakeholders as well as being aligned to the UK Corporate Governance Code.

Remuneration outturn for 2019

Against difficult trading conditions the Group's profit in 2019 was largely flat. This has demonstrated the resilience of the business to remain profitable with robust margins in subdued market conditions.

As the bonusable profit did not exceed the outcome for 2018, the threshold for the Annual Bonus Plan was not reached and no annual bonus is therefore payable.

Our longer-term performance in profitable growth and total shareholder return was more reflective of our long-term growth trajectory. For PSP, 2019 was the year in which grants made in 2017 concluded their three-year period, and the Committee has reviewed performance for the targets that were set at that time. Over the performance period, EPS growth was 18.7% resulting in 40.6% of this part of the award vesting. TSR performance was 84.2%, placing Croda in the top quartile against our bespoke comparator group resulting in 100% of this part of the award vesting. NPP growth was 1.8x non-NPP growth, falling just short of the target of twice growth, so this part of the PSP does not vest.

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 awards were consistent with, and reflective of, the overall business performance over the time period. Therefore, after consideration of all factors, an overall PSP vesting of 56.2% of the total award was agreed.

Salaries for 2020

For 2020 the general increase set for the UK workforce was 2%. The Committee considered the salaries of the Executive Directors in the context of positioning against market benchmarks, as well as the performance of the Company. The Committee determined that the salary increase for Executive Directors should be in line with that of the UK workforce.

Looking ahead

We are confident that our updated Remuneration Policy will serve us well over the next three years.

Going forward, we will continue to seek out opportunities to develop and enhance the remuneration approach at Croda. We remain committed to ensuring that our remuneration policies reflect the evolving needs and expectations of our shareholders, stakeholders and the societies in which we operate.

Yours sincerely

Helena Ganczakowski

Dr Helena Ganczakowski
Chair of the Remuneration Committee

B. 2019 Remuneration at a glance

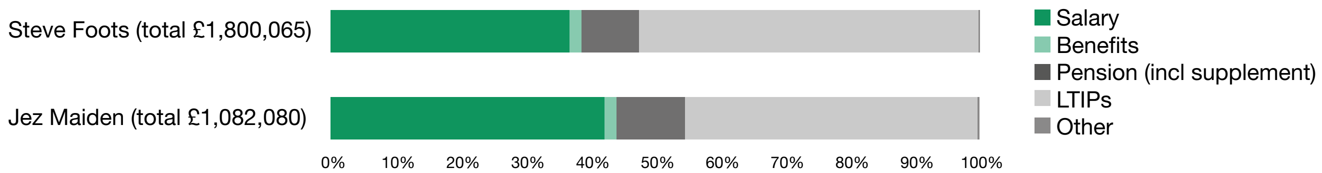
How we performed in 2019

Adjusted Operating Profit
-0.8% to £339.7m

Adjusted EPS
-2.7% to 185.0p

NPP
28.1% of Group sales

Single figure remuneration



How was our policy implemented in 2019?

Key component and timeline	Feature	Metrics and results	How we implemented in 2019: Chief Executive Officer (CEO)	How we implemented in 2019: Group Finance Director (GFD)
Basic salary and core benefits	Competitive package to attract and retain high calibre executives.	Pay rise of 3% awarded to Executive Directors. UK workforce was awarded a 3% increase	£662,337	£456,784
Annual bonus	Incentivise delivery of strategic plan, targets set in line with Group KPIs.	**Bonusable Profit** (see page 90 for definition of Bonusable Profit) Threshold: 2018 actual Maximum: 2018 actual plus 10% Actual: 2018 actual minus 3.7% 0% of maximum bonus paid	–	–
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	–	–
PSP	Incentivise execution of the business strategy over long term measuring profit, shareholder value and innovation.	**Vesting of the 2017 PSP award**	£942,268	£487,382
Pension	Pension benefits are either a capped career averaged defined benefit pension plan with a cash supplement above the cap, or a cash supplement. For 2019, cash allowance of up to 25% of salary.	N/A	£158,829	£114,196
Shareholding requirements	Share ownership guideline to ensure material personal stake in business.	CEO 200% of salary GFD 150% of salary	>200%of target	>150% of target

Vesting of the 2017 PSP award

	Threshold	Maximum	Actual over 3 years	% payout
EPS*	5%	11%	6.23%	16.24%
TSR	Median	Upper Quartile	84.2% Above UQ	40.00%
NPP	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.		Not met (1.8x)	0%
				56.24% total

* EPS growth p.a. is calculated on a simple average basis over the three-year period.

C. Overview of the new Remuneration Policy

Our proposed Remuneration Policy will be presented to shareholders at the 2020 AGM and is intended to operate for three years until the AGM in 2023.

In reviewing the Policy the Committee has considered the following principal objectives to:

- achieve the closest possible alignment with the Company's evolving 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 Committee's method of operation will be flexible and dynamic taking account of external changes and business performance.

Main changes to the Remuneration Policy

It is proposed to make changes to the Policy and application of the Policy in four key areas:

1. Reduction of the pension cash supplement for the CEO and GFD to align with our UK workforce.
2. Introduction of sustainability metrics, incorporating NPP, into the Performance Share Plan (PSP) to align with our strategy to be industry leaders in sustainability and the introduction of an EVA underpin to further ensure long-term incentive awards are aligned with overall business performance.
3. Increasing the level of normal PSP awards for Executive Directors from 200%/150% to 225%/175% for the CEO and GFD respectively, reflecting the significant long-term growth of the business.
4. Increasing shareholding guidelines and introducing post-employment shareholding requirements to ensure compliance with the UK Corporate Governance Code.

The remainder of this section provides the context to these changes.

1. Reduction of the pension cash supplement for the CEO and GFD to align with our UK workforce

Background

Croda is proud to be one of only two FTSE 100 companies with a defined benefit scheme in the UK that is open to new employees. The current scheme is a career-average pension scheme (CARE) which was introduced in 2016.

Within CARE, in return for a 6% contribution, all of our UK workforce have the opportunity to earn a guaranteed pension of 1/80th of salary for every year of service. Once this 1/80th is earned it is ring fenced and linked to CPI up until retirement.

This is a generous benefit for our UK workforce. By way of illustration, our actuaries have estimated that employees would need to save significantly more than 20% of their salary to provide a guaranteed equivalent benefit based on current market rates for annuity and savings.

Summary of pension arrangements

	Arrangements	Value
Wider UK workforce	All UK based employees can join Croda's defined benefit plan based on career average earnings (CARE) up to a cap of c.£70k Level of pension is guaranteed and not subject to investment risk Reflects that security for all our UK workforce is an important part of our 'One Croda' culture	Greater than 20% of salary[1]
	UK workforce who earn above the cap also receive a cash supplement of 20% of salary	
Executive Directors Existing and new hires	Opportunity to join CARE subject to tax limits with cash supplement of 20%[2] of salary above the cap	c. 20% of salary
	OR	
	Cash supplement of 20% of salary[2]	20% of salary
Overall comments	Alignment between Executive Directors and UK workforce in terms of opportunity.	Thanks to the defined benefit scheme, the wider UK workforce pension arrangements deliver a higher percentage value[1] than those for the Executive Directors

1. Value is estimated by Lane, Clark and Peacock LLP based on an employee funding an equivalent pension by purchasing an annuity assuming current market rates for annuity and savings
2. Implemented 1 January 2020

The value to employees is also that the level of pension is guaranteed. Unlike a money purchase scheme Croda bears the investment risk and once the employee has paid their contribution the rest of the cost is borne by the Company. This security for all our UK workforce is an important part of our 'One Croda' culture.

Within CARE, salaries are currently capped at c.£70k and for earnings above this cap a cash supplement is paid. Previously this supplement was 25% for Executive Directors, 20% for other members of the Executive Committee and 15% for all other employees. The supplement is also paid to employees on the whole of their salary who are tax limited and have opted out of the pension scheme.

Implemented Changes

We believe that the CARE scheme, with its guaranteed outcome, is a generous and inclusive scheme which remains open to the whole workforce in the UK. We recognise however that there were differences in the percentages of supplements paid for those exceeding the CARE salary cap. We have therefore levelled the pension supplement at 20% for all eligible employees. This will result in a reduction in the cash supplement for Executive Directors from 25% to 20% effective 1st January 2020.

As a result, the ongoing pension arrangements for our current Executive Directors will be fully aligned with (or lower than) our workforce rates. This is illustrated in the diagram on the previous page.

In light of this new proposal, future Executive Directors appointments would be aligned at the 20% pension supplement.

Summary of legacy final salary defined benefit pensions

In addition to the CARE scheme, employees in the pension arrangements at the time CARE was introduced received generous protection of their previous pension benefits; this protection maintained the link to their final salary going forward for pension earned pre-2016.

Further protection was provided for all members who joined prior to 2000 as they were also able to retain an accrual rate of 1/60th in CARE in return for a higher contribution rate of 8%. As our CEO was hired in 1990 he also retained an accrual rate of 1/60th in CARE in line with the majority of the UK workforce at the time.

When our CEO was appointed in 2012 he agreed to have his salary capped at his lower pre-appointment salary of £187,500 (further reduced to £150,000 in 2014) to avoid a significant additional liability being placed on the pension scheme, which at that time was a final salary scheme. Subsequently his salary cap has been reduced again to £37,500 due to annual allowance limits (further details of our CEO's pension arrangements can be found on page 93).

2. Introduction of sustainability metrics, and an EVA underpin to further ensure our long-term incentive awards are aligned with overall business performance

Sustainability has always been key for Croda. We are industry leaders in providing sustainable solutions for our customers and innovation in sustainable products is central to our long-term growth. We have therefore developed a range of ambitious long-term targets aimed at Croda becoming Climate, Land and People Positive, monitored via a scorecard of progress. To align to our commitment and strategy, it makes sense to incorporate sustainability measures into our long-term incentive plan. Under our proposed approach, each year key elements of this scorecard will be selected for inclusion in our long-term incentive plan.

Our proposal is to retain the Earning per Share (EPS) and relative Total Shareholder Return (TSR) both set at 35% of the award, 70% in total. In addition we will introduce a new set of sustainability metrics. The sustainability metric set at 30% of the award will incorporate our existing New and Protected Products (NPP) metric (20% of target) and also include measures aligned to progress against our ambitious long-term targets in Climate, Land and People (10% of target).

For 2020 we propose:

35%	+	35%	+	30%
EPS		TSR		Sustainability
(growth over 3 yrs)		(against relative peer group)		(including NPP at 20%)

Success for our sustainability metrics will be based on meaningful progress towards our 2030 targets, measured over three years. The metrics will be subject to minimum performance criteria, but payments will be made for part progress.

For 2020 awards, the following sustainability metrics are proposed:

Sustainability metrics	PSP weighting
Development of Decarbonisation Roadmaps, covering all our Scope 1 and 2 emissions to define how we will achieve our target of net zero greenhouse gas emissions by 2050 across all our geographically dispersed and complex footprint. Due to the inherent nature of our manufacturing operations, the development of these roadmaps will require us to find innovative solutions beyond those that have already been identified and adopted. The achievement of this target in full where we create innovative roadmaps for 100% of our emissions would be a 5% pay-out with a 2.5% pay-out for a better than 95% achievement.	5%
In addition, we also expect to see measurable reductions in our Scope 1 and 2 emissions over the next three years and have set a target of 30,000 tonnes against an adjusted 2018 baseline of 232,000 tonnes. The achievement for this target in full would be a 5% pay-out with a 2.5% pay-out for a better than 75% achievement.	5%
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, with payments being made on a sliding scale up to 5% growth per year.	20%

Definitions:

Decarbonisation Roadmap	A plan for a site, charting emissions reduction through for example, maximising use of renewable energy, novel process technologies and energy efficiency measures.
2018 baseline	2018 baseline has been independently verified by Carbon Smart, as has the breakdown of emissions per site. Adjustments have been made for the commissioning of the ECO plant and acquisitions.

EVA Underpin

Return on Invested Capital has always been an important internal metric for Croda and is already a key element of the Remuneration Committee's Discretion Framework. To reinforce the importance of Return on Invested Capital going forward, we will also be introducing a new Economic Value Added (EVA) underpin which will apply across the whole of the PSP award. This underpin would require an improvement in EVA over the three-year PSP performance period.

EVA, as a formal underpin, would use transparent and established methodologies and would be reviewed on an annual basis by the Committee and sit alongside our Discretion Framework. In circumstances where the Company did not see an improvement in EVA over the three-year performance period, the Committee would reduce or cancel any vesting of awards.

The Committee would retain the right to apply discretion to restrict the impact of the underpin in exceptional circumstances, for example material increases to tax rates or to the cost of capital or a major acquisition which had a significant effect on the Group's EVA.

EVA Calculation

EVA in the final year ('Year 3')	Minus	EVA in the year prior to the start of the performance period ('Year 0')

Definitions:

EVA	Net operating profit after tax ('NOPAT') less the charge for invested capital ('CIC') in that year
NOPAT	Adjusted operating profit less tax at the effective tax rate charged on adjusted profit in that year's income statement
CIC	Average of the opening and closing invested capital ('IC') for the year, multiplied by the post-tax cost of capital disclosed in the Annual Accounts for that year
IC	Adjusted invested capital represents net assets adjusted for net debt, earlier goodwill written off to reserves and accumulated amortisation of acquired intangible assets. Calculated on the same basis as shown in the Annual Report & Accounts.

Any awards made under this plan will remain subject to the Discretion Framework established in 2018; this framework provides assurance that the outcome of incentive plans are fair and reasonable in the context of overall company performance and shareholder experience.

3. Increasing the level of normal PSP awards for Executive Directors from 200%/150% to 225%/175% for the CEO and GFD respectively reflecting the significant long-term growth of the business

Since the CEO's appointment in 2012 Croda has consistently outperformed the FTSE with significant long-term growth across all KPIs. In this period our Market Capitalisation has increased from £2.5bn to £6.6bn and our share price from c.£17 to c.£50 per share. This expanded scope and growth means that Croda is now an established international FTSE 100 company.

As we now embark on a new strategic phase we will demand even more from our senior team; our ambition level has increased, and this will require bigger and bolder steps to deliver ever greater value.

In this context, we need to ensure appropriate compensation for Executive Directors. While our proposed approach has not been driven by benchmarking, as part of the review the Committee recognised that Croda is now placed below the lower quartile for total compensation compared to its industry and FTSE peers.

As a result, for 2020 the Committee proposes to increase the maximum potential PSP award, under normal circumstances, for the Chief Executive from 200% to 225% of salary and the Group Finance Director from 150% to 175% of salary; the current policy allows for normal maximum awards of up to 200%.

With this proposal the CEO and GFD will still remain in the lower quartile for total compensation against FTSE 100 industrials and the introduction of the EVA underpin will further ensure long-term incentive awards are aligned with overall business performance.

4. Increasing shareholding guidelines and introducing post-employment shareholding requirements to ensure compliance with the UK Corporate Governance Code and shareholders' expectations

Shareholding guidelines will continue to be set in line with 'normal' PSP awards; in line with the proposal above, levels for 2020 would increase to 225% for the CEO and 175% for the GFD.

We also propose to introduce post-employment shareholding guidelines, requiring Executive Directors to retain a shareholding guideline for two years after leaving the Company. They will be required to retain 100% of their shareholding guideline for one year after leaving employment, tapering down to zero by the end of the second year. This policy will apply only to awards that vest in 2020 and beyond.

During 2019 the rules relating to clawback were widened to include serious reputational damage and material corporate failure.

Proposed Remuneration Policy in full

The next section sets out our Remuneration Policy for 2020 to 2023 which will be subject to shareholder approval at the 2020 Annual General Meeting (AGM).

Croda's proposed Remuneration Policy will be presented to shareholders at the Company's 2020 AGM on 23 April 2020 and if approved will take effect from the date of the AGM. It would be intended to operate until its expiration at the Company's 2023 AGM.

The Policy was developed over the course of 2019 and early 2020. The Committee undertook a thorough review of arrangements with a particular focus on alignment to Croda's forward strategy and aspirations. Input was received from the Chair and management while ensuring that conflicts of interest were suitably mitigated. The Committee also considered carefully corporate governance developments, particularly in the area of pensions. Input was provided by the Committee's appointed independent advisors throughout the process.

Extensive shareholder consultation was undertaken during the second half of the year in good time for shareholder input to feed into the finalisation of proposals in early 2020.

The main changes to the Policy, as detailed on page 74 are:

- Reduction of the pension cash supplement for the CEO and GFD to 20% aligned to our UK workforce
- Introduction of sustainability metrics, incorporating NPP, into the Performance Share Plan (PSP) and the introduction of an EVA underpin
- Increased level of normal PSP awards for Executive Directors from 200%/150% to 225%/175% for the CEO and GFD respectively
- Increased shareholding guidelines and introduction of post-employment shareholding requirements.

Other minor changes have been made to improve the operation and effectiveness of the Policy.

Remuneration Policy table

The table below sets out the main components of Croda's Remuneration Policy for Executive Directors:

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 individuals 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 (e.g. 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 (e.g. EPS), shareholder return (e.g. relative TSR) and strategic targets (e.g. sustainability). The performance targets may also include an additional underpin (e.g. an EVA underpin). • Targets will normally be tested over three years. • In relation to financial targets (e.g. 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 (e.g. 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 $^{1}/_{60}$th 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.		

Annual Bonus Plan and Long-Term Incentive Policy

The Committee will operate the Annual Bonus Plan, DBSP, PSP and all-employee plans according to their respective rules and in accordance with the Listing Rules and HMRC rules where relevant. The Committee retains discretion, consistent with market practice, in a number of regards to the operation and administration of these plans. These include the following (performance targets restricted to the descriptions detailed in the preceding policy table):

- Who participates in the plans
- The timing of grant of award and/or payment
- The size of an award and/or payment
- The determination of vesting
- Dealing with a change of control (e.g. the timing of testing performance targets) or restructuring
- Determination of a good/bad leaver for incentive plan purposes based on the rules of each plan and the appropriate treatment chosen
- Adjustments required in certain circumstances (e.g. rights issues, corporate restructuring and special dividends)
- The annual review of performance conditions for the Annual Bonus Plan and PSP
- For DBSP, the extension of the length of the deferral period.

The Committee retains the ability to adjust the targets and/or set different measures and alter weightings for the Annual Bonus Plan and for the PSP if events occur (e.g. material divestment of a Group business or changes to accounting standards) which cause it to determine that an adjustment or amendment is appropriate so that the conditions achieve their original purpose.

The Committee may make minor amendments to the Remuneration Policy to aid its operation or implementation without seeking shareholder approvals (e.g. for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation).

Choice of performance measures and approach to target setting

Under the Annual Bonus Plan, an underlying profit-based objective such as profit growth will be used as the primary performance metric. Such a measure will be used as it aligns to growth in underlying profitability. The current profit-based measure also incentivises the efficient use of working capital. Other metrics may be used in the future where it is considered that they provide clear alignment with the evolving strategy of the Group.

In terms of long-term performance targets, PSP awards vest subject to:

- financial targets (e.g. EPS growth) that are informed by the Group's long-term financial ambitions (e.g. long-term targeted earnings growth)
- shareholder return targets (e.g. relative TSR) which provide clear alignment of interests between shareholders and Executives
- strategic targets (e.g. New and Protected Products (NPP) and sustainability targets) that align to our long-term strategic ambitions (e.g. commitment to being sustainability leaders, and to grow through innovation).

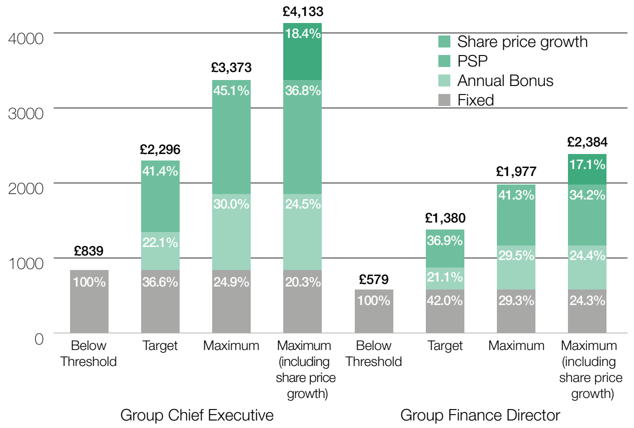
The Committee retains the discretion to adjust both the measures and weightings for each PSP award, subject to the broad framework above.

Financial and shareholder return targets (e.g. profit growth for the Annual Bonus Plan and EPS growth and relative TSR for the PSP) are set based on sliding scales that take account of internal planning and external market expectations for the Group. In relation to strategic targets or underpin targets, the structure of the target will vary based on the nature of target set. Targets and underpins may be set which provide for Committee judgement in assessing the extent to which they have been met.

In addition, prior to the determination of final outcomes, the Committee will apply its Discretion Framework to enhance the rigour and consistency of any payments and to ensure they truly align to overall Group performance and the wider stakeholder experience. While the Committee anticipates that any such discretion would normally result in a reduction, the Committee reserves the right to make an upwards adjustment if considered appropriate.

Only modest rewards are available for delivering threshold performance levels with maximum rewards requiring substantial out-performance of the challenging plans approved at the start of each year. No payment will be made under the Annual Bonus Plan nor will any shares vest under the PSP for performance below threshold. The Committee may reduce (but not increase) the levels of vesting for threshold performance set out in the Remuneration Policy table.

Remuneration scenarios for Executive Directors



Assumptions:
Below target = fixed pay only (base salary, benefits and pension)

On-target = 50% payable of the 2020 annual bonus and 62.5% vesting of the 2020 PSP Awards

Maximum = 100% payable of the 2020 annual bonus, 100% vesting of the 2020 PSP awards

Maximum (including share price growth) = as per maximum but including 50% share price growth of the PSP award

Salary levels (on which elements of the package are calculated) are based on those applying on 1 January 2020. The value of taxable benefits is based on the cost of supplying those benefits (as disclosed on page 91) for the year ended 31 December 2019. The pension value is based on the assumptions used to value pensions for the emoluments table (as disclosed on page 91) and a salary supplement in lieu of pension at 20% of salary where relevant. The Executive Directors can participate in the all-employee share plans on the same basis as other employees. The value that may be received from participating in these schemes has been excluded from the graph above.

Recruitment and Promotion Policy

For Executive Director recruitment and/or promotion situations, the Committee will follow the guidelines below:

Remuneration element	Policy
Base salary	Base salary levels will be set in accordance with the Group's Remuneration Policy, taking into account the experience and calibre of the individual. 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 individuals performance. Above market salaries may also be offered if the experience and calibre of the candidate is considered to justify such an approach being taken by the Committee.
Benefits	Benefits in accordance with the current policy. In addition, where necessary, the Committee may approve the payment of relocation expenses to facilitate recruitment.
Pension	Pension in accordance with the current policy. For an internal promotion, any legacy defined pension arrangements would be considered on a case by case basis.
Annual bonus	The annual bonus would operate in accordance with the current policy in terms of the maximum opportunity and performance targets, pro-rated for the period of employment as appropriate.
Long-term incentives	Share awards will be granted in accordance with the current policy in terms of maximum opportunity and performance targets. An award may be made shortly after an appointment (subject to the Company not being in a prohibited period). For an internal hire, existing awards would continue over their original vesting period and remain subject to their terms as at the date of grant.
Buy-out awards	In the case of an external hire it may be necessary to buy-out incentive pay or benefit arrangements (which would be forfeited on leaving the previous employer). Any such buy-out would be provided for taking into account the form (cash or shares), timing and performance conditions of the remuneration being forfeited. Replacement share awards, if used, will be granted using the Company's existing share plans within the limits detailed in the Remuneration Policy table. Awards may also be granted outside of these schemes if necessary and as permitted under the Listing Rules.

Directors' service contracts and payments for loss of office

Executive Directors' service contracts are terminable by the Company on up to one year's notice and by the Director on at least six months' notice.

In respect of termination, the Committee's policy is to deal with each case on its merits, in accordance with the law and any further policy adopted by the Committee at the time. In the event of early termination, other than for cause, the relevant Director's current salary and contractual benefits would be taken into account in calculating any liability of the Company.

The principal contractual benefits provided in addition to salary are the provision of a car or car allowance, private fuel allowance, pension, medical insurance and life assurance. Annual bonuses and long-term incentives are non-contractual and are dealt with in accordance with the rules of the relevant schemes.

The Committee's policy is also for contracts to contain provisions which enable the Company to terminate contracts at any time with immediate effect. The Executive Director would be entitled to receive compensation equivalent to up to twelve months' salary plus the value of their pension benefits (currently valued at 20% of basic salary) and the value of other benefits, payable in equal monthly instalments over the full notice period or, if less, the remainder of any notice period not yet completed. Such payments would normally discontinue or reduce to the extent that alternative employment is obtained.

An Executive Director's service contract may be terminated without notice for certain events such as gross misconduct. No payment or compensation beyond sums accrued up to the date of termination will be made if such an event occurs.

Payments may be made in respect of the Director's legal and/or professional advice fees in connection with their cessation of office or employment and/or fees for outplacement assistance.

Other than in the event of a good leaver circumstance, at the discretion of the Committee, no bonus may be payable unless the individual remains employed and is not under notice at the payment date. In the event that an individual does cease employment as a good leaver, bonuses would become payable subject to performance assessment, and pro-rata based on the number of complete calendar months worked in the relevant year. A portion of any bonus payable will normally be deferred into shares in line with normal policy. Good leaver circumstances include circumstances such as injury, ill-health or disability, redundancy, transfer or sale of the employing company, retirement with the Company's agreement or other circumstances at the discretion of the Committee (reflecting the circumstances that prevail at the time).

The treatment for DBSP awards previously granted to an Executive Director will be determined based on the plan rules. DBSP awards will normally subsist, except in the circumstance where an individual is summarily dismissed. The default treatment is that deferred shares will be delivered at the normal time, although the Committee may permit the awards to vest earlier.

The treatment for PSP awards previously granted to an Executive Director will be determined based on the plan rules. The default treatment will be for outstanding awards to lapse on cessation of employment. In relation to awards granted under the PSP, in certain prescribed circumstances, such as injury, ill-health or disability, redundancy, transfer or sale of the employing company, retirement with the Company's agreement or other circumstances at the discretion of the Committee (reflecting the circumstances that prevail at the time) 'good leaver' status applies. If treated as a good leaver, awards will be eligible to vest subject to performance conditions, which will be measured over the performance period (unless the Committee permits the award to vest at an earlier date), and will be reduced pro-rata (unless the Committee considers it appropriate not to do so) to reflect the proportion of the period between grant and normal vesting date actually served.

Treatment of shares awarded under HMRC all-employee plans will be in line with the share plan rules.

Shareholding Guidelines

The Committee operates share ownership guidelines which apply to all Executive Directors and the Group Executive Committee. The Group Chief Executive is subject to a share ownership guideline of 225% of salary and the other Executive Directors to 175% of salary.

It is expected that the guideline will be met within a five-year time period from its adoption (or date of joining for new appointments) through a combination of share purchases and the retention of incentive shares. On the exercise of Sharesave options or the vesting of awards from the Company's long-term incentive plans, Executives are required to retain shares awarded representing 50% of the net of tax gain until the ownership target is met or exceeded.

Executive Directors will also normally be required to retain a shareholding for two years after leaving the Company. They will be required to retain 100% of their shareholding guideline (or the actual shareholding of relevant shares on leaving, if lower) for one year after leaving employment, tapering linearly down to zero by the end of the second year. This policy will apply only to awards that vest in 2020 and beyond. The Committee has the discretion to waive this requirement in certain circumstances (e.g. compassionate circumstances).

External Appointments

Executive Directors may accept external non-executive appointments with the prior approval of the Board. It is normal practice for Executive Directors to retain fees provided for non-executive Director appointments.

Non-Executive Directors' Letters of Appointment

The Chair and Non-Executive Directors have letters of appointment for an initial fixed term of three years subject to earlier termination by either party on written notice. In each case, this term can be extended by mutual agreement. Non-Executive Directors have no entitlement to contractual termination payments. The dates of the initial appointments of the Non-Executive Directors are set out in the Annual Report on Remuneration.

Non-Executive Directors' fees

The policy on Non-Executive Directors' fees is:

Operations	Maximum opportunity	Framework used to assess performance and for the recovery of sums paid
To provide a competitive fee which will attract those high calibre individuals who, through their experience, can further the interests of the Group through their stewardship and contribution to strategic development		
Fee levels are set by reference to the expected time commitments and responsibilities, and are periodically benchmarked against relevant market comparators, as appropriate, reflecting the size and nature of the role. The Chair and Non-Executive Directors are paid an annual fee which is paid monthly in cash and do not participate in any of the Company's incentive arrangements or receive any pension provision. The Non-Executive Directors receive a basic Board fee, with additional fees payable for chairmanship of the Company's key Committees and for performing the Senior Independent Director role. Additional fees may be payable for other additional responsibilities. All Non-Executive Directors are reimbursed for travel and related business expenses reasonably incurred in performing their duties (and associated tax on these expenses). The Chair's fee is determined by the Committee (during which the Chair has no part in discussions) and recommended by them to the Board. The Non-Executive Directors' fees are determined by the Chair and the Executive Directors.	• Fee levels will be eligible for increases during the period that the Remuneration Policy operates to ensure they continue to appropriately recognise the time commitment of the role, increases to fee levels for Non-Executive Directors in general and fee levels in companies of a similar size and complexity.	None.

How Executive Directors' Remuneration Policy relates to the wider Group

The Executive Directors' Remuneration Policy provides an overview of the structure that operates for the Group Executive Directors and those senior Executives forming the Group Executive Committee (noting, however, that there are some differences in PSP participation and application of holding periods and shareholding requirement, within this group).

The Committee is made aware of pay structures across the Group when setting the Remuneration Policy for Executive Directors. The key difference is that, overall, the Remuneration Policy for Executive Directors is more heavily weighted towards variable pay and share ownership, than for other employees.

The alignment of Executive Director pensions with those of the UK workforce was a key consideration for the review of the Remuneration Policy. The UK workforce pension scheme is a generous and inclusive benefit for our UK workforce. With the reduction in the cash supplement for incumbent Executive Directors, pension arrangements for Executive Directors are now considered to be aligned with those across the UK workforce.

Base salaries are operated under the same policy as detailed in the Remuneration Policy table with any comparator groups used as a reference point, being country and/or industry specific. The Committee considers the general basic salary increase for the broader Group and, in particular, the UK based employees when determining the annual salary review for the Executive Directors. The performance related bonus scheme operates on a tiered basis from 150% of salary down to 20% of salary across the most senior global grades. Outside of the most senior tiers of Executives, the PSP is not operated as this arrangement is reserved for those anticipated as having the greatest potential to influence Group level performance.

However, the Committee believes in wider employee share ownership and promotes this through the operation of the HMRC tax approved all-employee share schemes which are open to all UK employees. Other similar share schemes are offered in other jurisdictions where local securities laws allow.

How the views of employees are taken into account

The Group has a diverse workforce operating globally in 34 different countries, with various local pay practices. The Group Human Resources Director updates the Committee periodically on feedback received on remuneration practices across the Group. In developing this Remuneration Policy, the Committee devoted time at the outset in considering the principles which apply to remuneration across the workforce. This included consideration of the 'One Croda' culture, as well as Croda's values and purpose. While the views of the global workforce were not explicitly sought during the process, alignment across the workforce was a key theme of the review.

How the views of shareholders are taken into account

In developing this Remuneration Policy, the Committee undertook an extensive shareholder consultation exercise, and the Chair of the Committee met with key shareholders to discuss the principles for the review and initial proposals. The Committee also considered emerging shareholder views in key governance areas. Feedback received during the consultation period was taken into account when developing the final Remuneration Policy.

D. Report of the Remuneration Committee for year ended 31 December 2019

How our Remuneration Policy links to strategy and to reward across our wider workforce

This section of our report provides the broader context of how our Remuneration Policy links to strategy and to reward across our wider workforce. We hope that it will provide a useful summary of the context of our Reward Policy and will show how our Reward Policy has and will continue to evolve to meet the needs of the business, our workforce and align with the UK corporate governance standards.

How our reward strategy links to our business strategy

Delivering profitable growth

Delivering sustainable profitable growth, both top and bottom line, is central to our business success. The key metric of our Annual Bonus Plan is profit increase over prior year. Longer term growth and progress on sustainability are measured and rewarded through the metrics within the PSP. Both the Annual Bonus Plan and PSP are subject to our Discretion Framework, which includes general financial underpins, enabling the Remuneration Committee to use its discretion to reduce payments if success has been achieved at the expense of other measures.

Sustainable solutions

We are industry leaders in providing **sustainable solutions** for our customers, and innovation in sustainable products is central to our long-term growth. Many of our customers are well known brands with a direct connection to consumers who increasingly expect branded products to be made using sustainable ingredients. Sustainability is at the centre of Croda's evolved strategy and therefore we have introduced for 2020 a set of sustainability metrics within the PSP.

Driving innovation

The sustainability metrics incorporate our New and Protected Products (NPP) measure as we believe that **driving innovation** is the key differentiator between ourselves and our peers, making us the preferred supplier for our customers. We reward success in this area directly through this metric in the PSP but we also recognise that sustained EPS growth can only come about through relentless innovation and the creation of new ingredients for our customers.

'One Croda' culture

We are proud of our '**One Croda' culture** and believe sustaining this culture is key to our ongoing success. One of the principal pillars of our culture is a strong sense of fairness and transparency, therefore we have the same simple bonus metric for the top 400 employees within Croda and profit must increase over prior year for any bonus to be paid. Creativity and innovation are also key pillars of our culture and are supported by the NPP metric within the PSP.

Long-term shareholder return

We strongly believe that all the various metrics of our Remuneration Policy combine to incentivise **long-term shareholder return.**

How our remuneration practices support **our strategy**

		Delivering growth	Driving innovation	Sustainable solutions	'One Croda' culture	Long-term shareholder return
Bonus	Profit	✓	✓		✓	
Long term incentive plan	EPS	✓	✓	✓	✓	✓
	TSR	✓	✓		✓	✓
	Sustainability	✓	✓	✓	✓	✓
Underpins	Safety, health and environment	✓		✓	✓	✓
	EVA*	✓				✓
	General financial & Discretion Framework	✓				✓
Other features	Holding periods					✓
	Shareholding requirements					✓

* New for 2020 policy year

How our Remuneration Policy links to the UK Corporate Governance Code

When developing the proposed Remuneration Policy and considering its implementation for 2020, 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. • We have spent many months consulting with shareholders on our proposed policy for 2020. • We have sought to explain the changes to our proposed Remuneration Policy in a way that highlights their alignment to both our strategic ambitions as well as the provisions of the new 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 Annual Bonus Plan, in which around 400 of our global employees participate, is based on a single profit metric, with a simple key requirement that no bonus can be paid unless and 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 measures and health and safety underpins. We then take a holistic assessment of performance using our Discretion Framework. A copy of the Discretion Framework is provided on the next page. • Annual bonus deferral, the PSP holding period and our strengthened 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 annual bonus and PSP and have recently been updated to include serious reputational damage and material corporate failure.
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 as demonstrated above. 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 bonus scheme 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

In order to enhance the rigour and consistency in the way in which performance is reviewed the Remuneration Committee has adopted a Discretion Framework which it applies when assessing bonus and long-term incentive plan outcomes:

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 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

EVA*/ROIC | **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?

* New for 2020 policy year.

Workforce Engagement

The engagement of the workforce to explain how executive remuneration aligns to the wider company pay policy is an area where we continue to develop our approach. By utilising pulse surveys and a dedicated email address for employees to contact the Chair of the Committee we hope to understand how best to consult with our geographically dispersed population. The following activities have been undertaken to date:

Global Employee Survey	During 2019 the Committee developed and approved a set of Reward Principles to guide the way we recognise and remunerate all our global employees. These principles focused on Total Reward including intangible rewards and were strongly influenced by our Global Employee Survey results.
Pulse surveys	A pulse survey, translated into 16 languages, has been used to draw employee's attention to the publication of the Remuneration Report and to help us understand the level of interest in the report; further pulse surveys will be issued following the publication of the 2019 report to generate more interest and stimulate questions and debate.
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 routinely updated on global employees' terms and conditions and are made aware of any significant changes to policies and other pay related matters.
Board roadshows	Our Executive Directors and Board regularly hold roadshows that allow a cross section of our global workforce to discuss business issues and provide feedback.

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. During 2019, the Committee was provided with a review of workforce remuneration and this now forms part of our normal Remuneration Committee cycle.

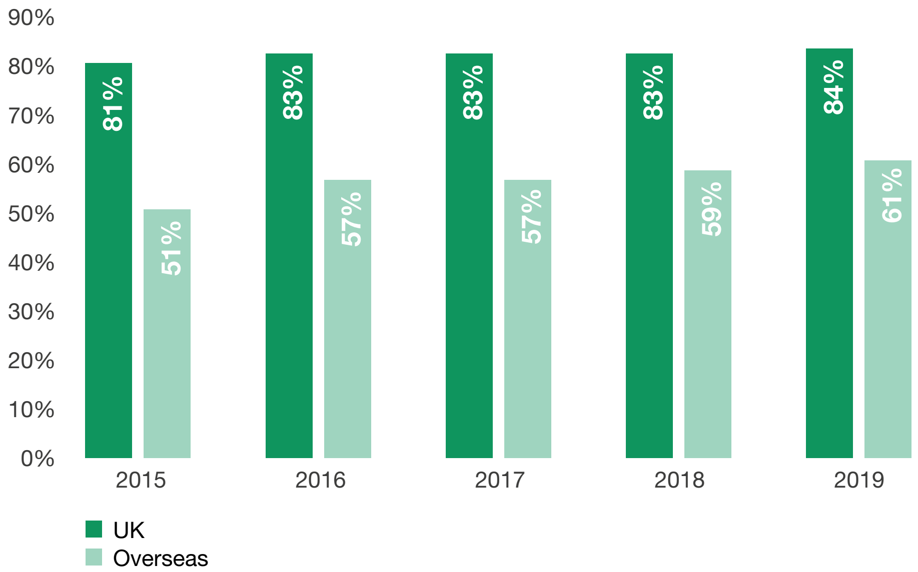
One of the principles of Croda's culture is to drive 'One Croda', therefore, many of the remuneration structures that apply to Executives also apply further in the global organisation:

Base pay	**All employees:** Pay is set in line with the market and closely monitored, our aim is to pay a 'living wage' globally. We are already a living wage employer in the UK.
Annual bonus	**Executive Directors, Executive Committee, Senior leaders and Senior managers:** Consistent global bonus scheme aligned to increase in annual profit. **All other employees:** Local schemes apply in many locations.
Performance Share Plan	**Executive Directors, Executive Committee and Senior leaders:** Consistent PSP based on EPS, TSR and sustainability.
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

Employee participation in employee share schemes

Workforce participation in our employee share plans has remained consistently strong and is driven by our culture of employees feeling a strong loyalty to the business. We were proud that this performance was recognised by the Chartered Governance Institute who highly commended Croda in the ProShare award category of Best Overall Performance in Fostering Employee Share Ownership.



CEO Pay Ratio

Under the Government's regulations, for financial years beginning on or after 1 January 2019, quoted companies registered in the UK (with more than 250 UK employees) are required to publish the ratio of their CEO's 'single figure' total remuneration to the 25th, 50th and 75th percentile total remuneration of their full-time equivalent UK employees. The pay ratios are calculated on a group-wide basis by reference to UK employees only.

There are three methodologies that companies can choose to report their pay ratio, known as Option A, B and C, and for 2019 we have chosen to use the government's preferred option, Option A. Using this methodology, we have determined the fulltime equivalent total remuneration for all UK employees and have ranked this data to identify employees whose remuneration places them at 25th, 50th and 75th percentile. These three pay ratios are then calculated against our CEO 'single figure' total remuneration.

The table below sets out our headline CEO Pay Ratio at the 25th, 50th and 75th percentile.

	25th Percentile	50th Percentile	75th Percentile
FY 2019	61:1	46:1	39:1
FY 2018	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 excludes the value of the defined benefit pension plan due to the difficulty of calculating these figures for our complex historic pension arrangements.
3. Excludes Non-Executive Directors, contractors and employees who left during 2019.
4. New starters during 2019, part time employees and employees on long-term sick and maternity are included; their salary has been grossed up to reflect a fulltime and full year salary.

The CEO Pay Ratio is calculated based on the total remuneration payable to the CEO in respect of 2019, as set out on page 91, which includes payments under the annual bonus and PSP. The outcomes of these elements are significantly linked to performance, with the value of the PSP also incorporating share price growth. It is therefore expected that the ratios will fluctuate year-on-year to reflect Croda's performance. In respect of the 2019 figures in the previous table, the ratios particularly reflect Croda's continued strong financial and share price performance.

Employee total remuneration

	Actual base salary 2019	Total remuneration 2019
75th percentile	£44,972	£46,113
50th percentile	£37,916	£38,856
25th percentile	£29,512	£29,552

We believe that the outcome of our CEO pay ratio calculation is consistent with our pay, reward and progression policies.

Comparison to 2018 Pay Ratio

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 were not in place. These processes were established in January 2019 enabling us to use the preferred Option, Option A for the 2019 calculation.

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 2020 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.

We have set ourselves a goal within the Sustainability KPI Framework to ensure that at every location globally we pay our employees at minimum a "living" wage, that goes beyond the legal minimums, ensuring that we can provide an appropriate standard of living for all of our employees (see the Sustainability Report for more information).

More than just pay

Our employees and our culture remain central to the continued success of Croda and in addition to pay and benefits we also have a range of other workforce initiatives:

- In 2019 we began the use of regular pulse surveys on a range of topics to gauge employee opinions and morale.
- We further developed our People Dashboard that provides senior management with data relating to a range of people topics including diversity, turnover, balanced shortlists, exit interviews and progress against employee engagement targets.
- We implemented a range of wellbeing and diversity initiatives including supporting various diversity days, improving flexible working and implementing Mental Health First Aiders in the UK.
- During 2019 we further progressed the implementation of our new Global HR system, including new Performance Management, Learning, Talent, Recruitment and Onboarding modules; this included the launch of over 250 on-line training programmes.
- We are proud of the training and development that we provide for employees. In 2019 our employees undertook 105,579 hours of training.
- We are also developing career paths which will provide structured career development, for employees in functional roles, including operations, sales, and R&D.

Gender Pay Gap

The table below shows a summary of the Gender Pay Gap for Croda Europe Ltd:

	2018	2019
Mean pay gap	27.68%	**27.06%**
Median pay gap	23.10%	**23.90%**
Mean bonus gap	63.05%	**67.08%**
Median bonus gap	33.26%	**33.36%**

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.

Those actions 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
- Improving family friendly policies including flexible working, parental leave and other benefits; in 2019 we introduced a new Global Parental Leave Policy and many of our global locations have introduced flexible working
- 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.

Remuneration Committee year ended 31 December 2019

Responsibilities

The Committee determines and agrees with the Board the Company's Remuneration Policy and framework. It determines the remuneration packages for all Executive Directors, members of the Executive Committee and the Chair and recommends and monitors the level and structure of remuneration for senior managers.

Key responsibilities of the Committee:

Detailed responsibilities are set out in the Committee's terms of reference, which can be found at croda.com/en-gb/investors/governance/board-committees/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 (the 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 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.

The Company's remuneration policies and practices should:

- Support the Company's strategy and promote long-term sustainable success
- 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.

Summary of key decisions for 2019

- Vesting of 2016 PSP awards; the EPS target representing 50% of the award was met in full as was the TSR target therefore the overall award vesting was at 100%
- Payment of the 2018 annual bonus in March 2019 at 36.19% of maximum target
- Granting of the 2019 PSP awards based on 40% EPS, 40% TSR and 20% NPP target
- Granting of new Restricted Share Plan awards to a small number of selected employees below the Executive Committee
- Establishing the annual bonus target for 2019
- The salary of the CEO and Group Finance Director to be increased by 2% effective 1 January 2020, in line with the UK workforce
- The fee of the Chair to also be increased by 2% effective from 1 January 2020.

Summary of Remuneration Committee Meetings

January 2019 **London, UK**	• Approved the targets for the 2019 Annual Bonus Plan • Agreed Chair and Executive Committee salary increases
February 2019 **York, UK**	• Reviewed the draft Director Remuneration Report • Approved the calculation for 2018 annual bonus award for payment in March 2019 • Approved the vesting outcome for the 2016 PSP awards • Approved the granting of PSP awards for 2019 • Approved the granting of the Restricted Share Plan awards • Reviewed the update on ABI headroom limits as they apply to the business
April 2019 **Harrogate, UK**	• Gave authority for UK employees to join the UK Sharesave scheme and non-UK employees to join the International Sharesave scheme • Reviewed workforce remuneration • Agreed dividend enhancement to the Deferred Bonus Share Plan
November 2019 **York, UK**	• Discussed outline policy changes • Considered and reviewed remuneration trends specifically the new UK Corporate Governance Code • Reviewed shareholder consultation feedback
December 2019 **York, UK**	• Agreed proposed policy changes • Approved salary increases for Executive Directors • Reviewed proposed targets for the 2020 annual bonus and PSP award • Considered the Committee's effectiveness review

In addition, the Board met in June 2019 for a Remuneration Policy 'Blue-Sky' day and considered the following:

- reward policy and strategy alignment
- companywide reward principles
- all stakeholders interest in reward.

Executive Directors Remuneration for the year ending 31 December 2020

Key component	Implementation in 2020

Basic salary

Executive Directors' base salaries were reviewed during the final quarter of the financial year ended 31 December 2019. Salaries for 2020 are as follows:

	Salary at Jan 2020	Salary at Jan 2019	Increase
Steve Foots	£675,584	£662,337	2%
Jez Maiden	£465,920	£456,784	2%

- UK based employees will be awarded an increase of 2% in 2020

Commentary

- The Committee considered each individual's progression in their role as well as their responsibilities, performance, skills and experience.
- The Committee also considered the wider pay levels and salary increases being proposed across the Group as a whole.

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 2019 actual	0%
Maximum	2019 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 IFRS2 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.

Commentary

- No change to maximum awards or performance measures from last year.
- When determining bonus outcomes, the Committee applies the Discretion Framework which includes a range of factors, see page 85.
- One third of any bonus paid will be deferred into shares for a three-year period.
- Malus provisions apply.
- Full retrospective disclosure of targets and actual performance against these will be made in next year's Annual Report on Remuneration.
- The Committee remains comfortable that the structure of the annual bonus 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.
- The Committee considers the targets set for 2020 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
NPP (20%)	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, with payments being made on a sliding scale up to 5% growth per year	

Sustainability metrics (10%)

- Development of decarbonisation roadmaps[3], covering all our Scope 1 and 2 emissions to define how we will achieve our targets across all our geographically dispersed and complex footprint. The achievement of this target in full would be a 5% pay-out with a 2.5% pay-out for a better than 95% achievement.
- Measurable reductions in our Scope 1 and 2 emissions over the next three years. We have set a target of 30,000 tonnes against an adjusted 2018 baseline of 232,000 tonnes[4]. The achievement for this target in full would be a 5% pay-out with a 2.5% pay-out for a better than 75% achievement. See page 75 for further details.

EVA underpin which applies across the whole PSP award.

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. Decarbonisation Roadmap: A plan for a site, charting emissions reduction through for example, maximising use of renewable energy, novel process technologies and energy efficiency measures.
4. 2018 baseline has been independently verified by Carbon Smart, as has the breakdown of emissions per site. Adjustments have been made for the commissioning of the ECO plant and acquisitions.

Commentary

- Changes made to both the maximum awards and performance measures from prior years.
- 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 provision apply.
- Performance period 01 January 2020 to 31 December 2022.

Pension

Steve Foots	Jez Maiden
Membership of CARE pension plan up to salary cap and 20% of salary as pension supplement above the cap.	20% of salary as pension supplement.

Commentary

- The 20% pension supplement aligns to our UK workforce. For full details see the diagram on page 74.

E. Directors' remuneration for the year ended 31 December 2019 – Audited Information

In this section

i. Directors' remuneration for the year ended 31 December 2019

Elements of remuneration

Executive Directors' remuneration

Executive Director		Salaries and fees[1] £	Benefits[2] £	Pension[3] supplement £	Pension[4] £	Annual bonus £	Long term Incentives[5A-B] £	Other[6] £	Total £
Steve Foots	**2019**	**662,337**	**33,476**	**156,209**	**2,620**	**–**	**942,268**	**3,155**	**1,800,065**
	2018	643,046	33,320	151,386	44,000	349,078	2,087,278	3,592	3,311,700
Jez Maiden	**2019**	**456,784**	**19,667**	**114,196**	**–**	**–**	**487,382**	**4,051**	**1,082,080**
	2018	443,480	16,055	110,870	–	200,619	1,079,637	4,048	1,854,709
Total	**2019**	**1,119,121**	**53,143**	**270,405**	**2,620**	**–**	**1,429,650**	**7,206**	**2,882,145**
	2018	1,086,526	49,375	262,256	44,000	549,697	3,166,915	7,640	5,166,409

1. Steve Foots' salary before salary sacrifice pension contributions of £3,000.
2. Benefits include benefit-in-kind for company car or cash allowance, benefit-in-kind for private medical insurance and private fuel allowance.
3. Represents the 25% supplement paid to Steve Foots and Jez Maiden in relation to benefits provided above the salary pension cap.
4. 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.
5. A. The PSP awards granted in March 2017 reached the end of their performance period on 31 December 2019. The awards will vest at 56.2% (see page 92). The values included in the table above are based on the three-month average price to 31 December 2019 of 4807p. Of these values, £240,575 and £124,436 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 9 March 2020.
   B. The 2018 PSP award has been updated to reflect the actual share price at vesting of 5055.9p.
6. Represents the value received in the year from participation in all-employee share schemes. Steve Foots and Jez Maiden both received 33 matching shares as part of the Share Incentive Plan (SIP) with a transaction value of £1,811. Both Steve Foots and Jez Maiden also participated in the 2019 Sharesave scheme and were granted 138 and 230 shares respectively at a discounted rate of 3898p. The share price on the date of grant was 4872p representing a 20% discount.

Annual bonus

The 2019 bonuses for Executive Directors were calculated by reference to the amount by which the profit for the year exceeded the profit for 2018 (the 'bonusable profit'). Bonuses for 2019 are payable against a graduated scale once the 2019 Bonusable Profit exceeds the base profit with bonus targets set, and performance measured, based on constant currency actual exchange rates.

	Threshold target	Maximum target	Actual	Bonus outcome (% of maximum)
Bonusable Profit	£357.2m	£392.9m	£343.8m	0%

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. In addition, the Committee has developed a rigorous framework for the application of judgement and discretion in reviewing awards (see page 85).

PSP

PSP awards vesting in March 2020

The PSP awards granted in March 2017 reached the end of their three-year performance period on 31 December 2019.

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)	84.2 percentile	100%
Adjusted annual average EPS growth over three years[2]	40%	5% p.a.	11% p.a.	6.23% p.a.	40.6%
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.		1.8x	0%

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 85. 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 2017, subject to the above performance targets, is included in the 2019 single figure table on page 91. 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	04 March 2019	41,284	PSP	0	5055.9p	£2,087,278
	04 March 2019	6,855	DBSP	0	5055.9p	£346,582
	08 November 2019	204	Sharesave	2639p	4814p	£4,437
Jez Maiden	04 March 2019	21,354	PSP	0	5055.9p	£1,079,637
	04 March 2019	3,779	DBSP	0	5055.9p	£191,062
	08 November 2019	341	Sharesave	2639p	4814p	£7,417

PSP awards granted in 2019

The PSP awards granted on 12 March 2019 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	27,494	200%	1,324,660	25% (100%)	01.01.19 – 31.12.21
Jez Maiden	14,221	150%	685,167	25% (100%)	01.01.19 – 31.12.21

1. Face value/maximum value is calculated based on a shares price of 4818p, being the average mid-market share price of the three dealing days prior to the date of grant.

Any shares vesting will be subject to a two year holding period.

The 2019 PSP awards are subject to a performance condition which is split into three parts; 40% EPS, 40% TSR, and 20% NPP. Vesting will take place on a sliding scale. Targets were consistent with the PSP awards granted in 2017, as stated above.

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 147.

Executive Director	SIP shares held 01.01.19	Partnership shares acquired in year	Matching shares awarded in year	Total shares 31.12.19*	SIP shares that became unrestricted in the year	Total unrestricted SIP shares held at 31.12.19
Steve Foots	5,662	33	33	5,728	104	5,403
Jez Maiden*	279	33	33	355	1	1

There have been no changes in the interests of any Director between 31 December 2019 and the date of this report, except for the purchase of six SIP shares and six matching shares by Steve Foots and Jez Maiden during January and February 2020.

* Jez Maiden also had 10 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 01.01.19 (10.357143p shares)	Granted in year	Exercised in the year	Number at 31.12.19 (10.609756p shares)
Steve Foots								
16 September 2016	01 November 2019	30 April 2020	£6,728.94	2639p	204	–	204	–
13 September 2017	01 November 2020	30 April 2021	£6,725.10	3092p	174	–	–	174
27 September 2018	01 November 2021	30 April 2022	£8,959.67	4144p	173	–	–	173
12 September 2019	01 November 2022	30 April 2023	£6,723.36	3898p	–	138	–	138
					551	**138**	**204**	**485**
Jez Maiden								
16 September 2016	01 November 2019	30 April 2020	£11,247.89	2639p	341	–	341	–
27 September 2018	01 November 2021	30 April 2022	£11,238.43	2639p	217	–	–	217
12 September 2019	01 November 2022	30 April 2023	£11,205.60	3898p	–	230	–	230
					558	**230**	**341**	**447**

During 2019, the highest mid-market price of the Company's shares was 5377.5p and the lowest was 4545.42p. The year end closing price was 5120p. The year end mid-market price was 5150p.

* Face value is calculated using the market value on the day before the date of grant, multiplied by the number of shares awarded.

ii. 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	Accrued pension 2019	Single remuneration figure 2019	Single remuneration figure 2018	Single remuneration figures excluding supplement
Steve Foots	14 September 2033	£125,915	£158,829	£195,386	£2,620
Jez Maiden	N/A	–	£114,196	£110,870	–

Note: Members of the CPS have the option to pay voluntary contributions. Neither the contributions nor the resulting benefits are included in this table. During 2019, Steve Foots was paid £156,209 (2018: £151,386) and Jez Maiden was paid £114,196 (2018: £110,870) 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 Executives are tailored to local market practice, length of service and the participant's age. In 2016 a Career Average Revalued Earnings 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 2020 will be £70,420. 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 current Executive Directors this supplement is up to 25% of salary. This percentage has reduced to 20% in 2020 for new and existing Executive Directors, which is in line with members of the UK workforce. See pages 74 to 75 for further details of our revised pension arrangements.

Steve Foots' pension provision

Steve Foots accrues pension benefits under the Croda Pension Scheme (CPS) with a CARE accrual rate of 1/60th and an entitlement to retire at age 60. From 6 April 2011 onwards, pension benefits accruing are 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 is frozen at this amount. 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 the CPS. He also received a pension supplement at 25% of salary above his personal pension benefit cap in 2019. This pension supplement has reduced to 20% of salary in 2020.

Jez Maiden's pension provision

Jez Maiden has elected not to join CARE and was therefore paid a pension supplement of 25% of salary in 2019. This pension supplement has reduced to 20% of salary in 2020. He has an agreement with the Company to provide him with death-in-service benefits outside of the CPS.

iii. Payments for cessation of office

There were no payments for loss of office during the year under review.

iv. Payments to past directors

There were no payments to past directors during the year under review.

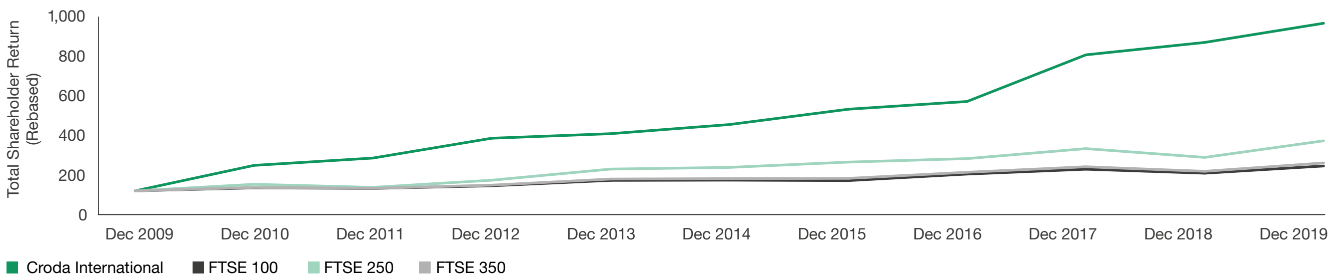
v. Share interests

The interests of the Directors who held office at 31 December 2019 are set out in the table below:

	Legally owned[1]					SIP			
	31.12.18	31.12.19	PSP (unvested)	DBSP (unvested)[2,3]	Sharesave (unvested)[4]	Restricted	Unrestricted	Total 31.12.19	% of salary held under shareholding guideline[4]
Executive Director									
Steve Foots	159,233	176,760	90,277	15,545	485	325	5,403	288,795	>200% target
Jez Maiden	16,184	27,167	46,695	8,755	447	354	1	83,419	>150% target
Non-Executive Director									
Roberto Cirillo	–	–	–	–	–	–	–	–	–
Alan Ferguson	2,414	2,357	–	–	–	–	–	2,357	–
Jacqui Ferguson	–	76	–	–	–	–	–	76	–
Anita Frew	9,655	9,425	–	–	–	–	–	9,425	–
Helena Ganczakowski	370	361	–	–	–	–	–	361	–
Keith Layden	78,993	80,400	–	3,883	–	–	–	84,283	–
Steve Williams*	11,983	–	–	–	–	–	–	–	–

* Steve Williams retired in April 2019.
1. Including connected persons.
2. Represents DBSP awards and, for Keith Layden in respect of his 2017 bonus, a deferred share award equivalent to a DBSP award.
3. During 2019 Steve Foots and Jez Maiden were granted 2,415 and 1,387 shares respectively under the DBSP. These awards relate to their 2018 bonus and were granted on 12 March 2019 based on a share price of £48.18 being the 3 day average consecutive share price from 7 March 2019 to 11 March 2019.
4. For 2020, the shareholding guidelines for the Chief Executive Officer and Group Finance Director will increase to 225% and 175% of salary, respectively.

vi. Performance graph (unaudited information)



vii. 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.

	2010*	2011*	2012^	2013^	2014^	2015^	2016^	2017^	2018^1	**2019^**
Total remuneration (£)	3,224,875	4,142,608	1,364,048	1,427,156	769,414	1,374,046	2,404,441	3,570,251	3,311,700	**1,800,065**
Annual bonus (%)	100%	100%	28%	0%	0%	76.38%	100%	78.36%	36.19%	**0%**
Long term incentives vesting (%)	100%	100%	100%	81.8%	0%	0%	43%	100%	100%	**56.2%**

* Relates to Mike Humphrey
^ Relates to Steve Foots
1. The 2018 PSP award has been updated to reflect the actual share price at vesting of 5055.9p.

viii. Board Chair and other Non-Executive Directors' fees 2019 and 2020

The fees paid to the Non-Executive Directors (including chairing of Committees) and to the Senior Independent Director were reviewed in January 2020 and increased by 2%. These changes will take effect from 1 January 2020. The revised fee structure for the Board Chair and other Non-Executive Directors for 2020 is detailed below.

Non-Executive Director	Position	2019 fee £	2020 fee £
Anita Frew	Board Chair	295,000	300,900
Roberto Cirillo	Non-Executive Director	62,000	63,240
Alan Ferguson[1]	Audit Committee Chair & Senior Independent Director	87,300	89,046
Jacqui Ferguson	Non-Executive Director	62,000	63,240
Helena Ganczakowski[1]	Remuneration Committee Chair	77,000	78,540
Keith Layden	Non-Executive Director	62,000	63,240
John Ramsay[2]	Non-Executive Director	–	63,240
Steve Williams[3]	Non-Executive Director	62,000	–

1. Committee Chairs received a supplementary fee of £15,000 in respect of their additional duties in 2019. This will increase in 2020 to £15,300. The Senior Independent Director received a supplementary fee of £10,300 in respect of his additional duties in 2019. This will increase in 2020 to £10,506. In addition, in 2020 the Non-Executive Director base fee will increase from £62,000 to £63,240.
2. John Ramsay was appointed to the Board in January 2020.
3. Steve Williams retired in April 2019. His fees were pro-rated accordingly.

ix. Non-Executive Directors' remuneration

The remuneration of Non-Executive Directors for the year ended 31 December 2019 payable by Group companies is detailed below, this table reflects actual payments in 2019.

		Non-Executive Director salaries and fees £	Benefits[1] £	Total £
Anita Frew	**2019**	**295,000**	**5,546**	**300,546**
	2018	245,140	8,636	253,776
Steve Williams[2]	**2019**	**20,667**	**2,787**	**23,454**
	2018	59,965	3,468	63,433
Alan Ferguson	**2019**	**87,300**	**3,004**	**90,304**
	2018	73,936	6,323	80,259
Helena Ganczakowski	**2019**	**77,000**	**4,805**	**81,805**
	2018	63,636	5,152	68,788
Jacqui Ferguson[3]	**2019**	**62,000**	**2,455**	**64,455**
	2018	18,883	1,623	20,506
Roberto Cirillo[4]	**2019**	**62,000**	**5,845**	**67,845**
	2018	38,420	2,599	41,019
Total	**2019**	**603,967**	**24,442**	**628,409**
	2018	499,980	27,801	527,781

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. Steve Williams retired 24 April 2019.
3. Jacqui Ferguson was appointed to the Board in September 2018.
4. Roberto Cirillo was appointed to the Board in April 2018.

	Executive Director pay and benefits						Non-Executive Director pay and benefits		
Keith Layden[1]	Base pay £	Benefits £	Pension supplement £	Other £	Annual bonus £	PSP[2] £	Fee £	Benefits £	Total £
2019	**–**	**–**	**–**	**–**	**–**	**–**	**62,000**	**861**	**62,861**
2018	–	–	–	–	–	322,111	56,650	1,492	380,253

1. Keith Layden retired as an Executive Director in April 2017. Following his retirement, he was appointed as a Non-Executive Director. The 2018 PSP amounts shown relate to the 2016 PSP award, which was subject to performance conditions and pro-rating.
2. The 2018 PSP award has been updated to reflect the actual share price at vesting of 5055.9p.

Non-Executive Directors appointment

The effective dates of the letters of appointment for the Board Chair and each Non-Executive Director who served during 2019, are shown in the table below:

Non-Executive Director	Original appointment date	Expiry date of current term
Anita Frew	05 March 2015	05 March 2021
Roberto Cirillo	26 April 2018	26 April 2021
Alan Ferguson[1]	01 July 2011	30 June 2020
Jacqui Ferguson	01 September 2018	01 September 2021
Helena Ganczakowski	01 February 2014	31 January 2021
Keith Layden	01 May 2017	01 May 2020
Steve Williams[2]	01 July 2010	30 June 2019

[1] Alan Ferguson will retire at the AGM in 2020
[2] Steve Williams retired 24 April 2019.

x. Service contracts and outside interests

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. Jez Maiden was appointed as a Non-Executive Director of PZ Cussons on 16 October 2016 and received a fee of £65,990 for 2019.

xi. Remuneration Committee attendance and advisers

Members and attendance (eligibility) at meetings held during the year ended 31 December 2019:

Helen Ganczakowski – Chair	5 (5)
Alan Ferguson – Senior Independent Non-Executive Director	5 (5)
Steve Williams* – Independent Non-Executive Director	3 (3)
Roberto Cirillo – Independent Non-Executive Director	5 (5)
Jacqui Ferguson – Independent Non-Executive Director	5 (5)

* Steve Williams retired 24 April 2019.

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 2019, invitees included other Directors and employees of the Group and the Committee's advisers (see below), including 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.

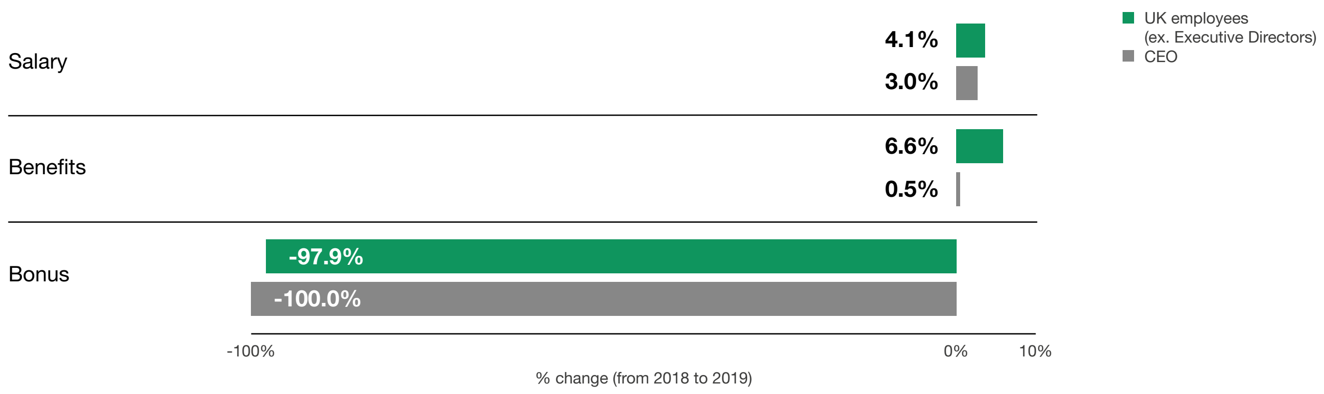
Remuneration Committee advisers (unaudited information)

Deloitte LLP were retained as the appointed adviser to the Committee for the whole of 2019, having been appointed in October 2017. 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 and indirect tax. Deloitte LLP is a signatory to the Remuneration Consultants Group Code of Conduct. Deloitte LLP has no connection with any individual director of Croda. The total fees paid to Deloitte LLP for its services during the year in relation to Executive remuneration and Non-Executive fees were £83,275 (excluding VAT). The Committee regularly reviews the external adviser's relationship and is comfortable that the advice it is receiving remains objective and independent.

xii. Other disclosures (unaudited information)

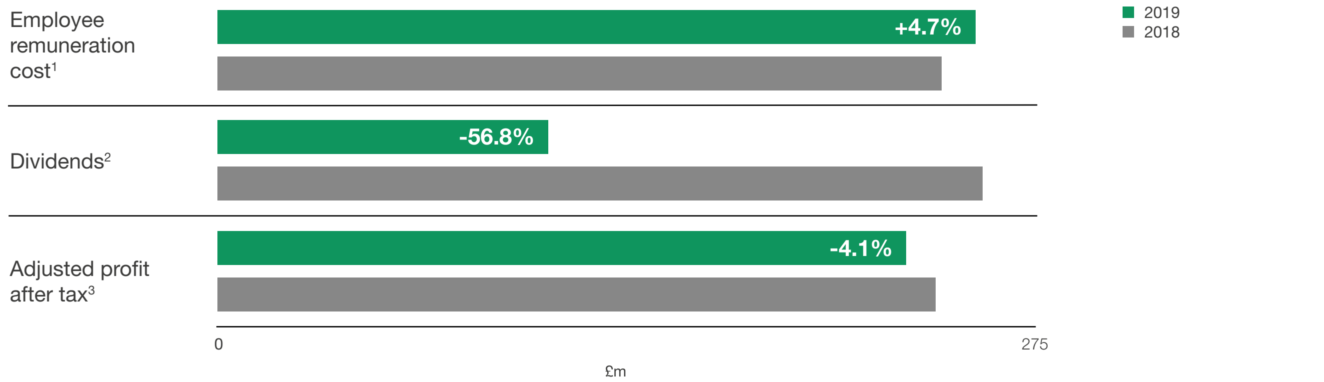
Percentage change in remuneration levels

The following chart shows the movement in the salary, benefits and annual bonus for the Group Chief Executive between the current and previous financial year compared with that of the average UK employee. The Committee has chosen this comparator as it feels it provides a more appropriate reflection of the earnings of the average worker than the movement in the Group's total wage bill, which is distorted by fluctuations in the number of employees and variations in wage practices in our overseas markets.



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 127. 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. The dividend amount shown in respect of 2018 includes a special dividend of 115.0p per share.
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.

xiii. Statement of voting (unaudited information)

	Remuneration Policy 2016		Annual Report on Remuneration 2018	
	number of votes	% of votes	number of votes	% of votes
Votes cast in favour	77,434,375	86.34%	85,949,463	88.70%
Votes cast against	12,253,393	13.66%	10,947,479	11.30%
Total votes cast	89,687,768	100%	96,896,942	100%
Withheld	320,236		173,343	

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
Chair of the Remuneration Committee

24 February 2020

Other Disclosures

Pages 44 to 101 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 50.5p per share (2018: 49p). If approved by shareholders, total dividends for the year will amount to 90p per share (2018: 87p). Details of dividends are shown in note 8 on page 126; details of the Company's Dividend Reinvestment Plan can be found on page 159. 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 147.

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 46 and 47. In line with the 2018 UK Corporate Governance Code, each Director will be standing for election or re-election at the AGM, with the exception of Alan Ferguson, who will retire at the AGM. Details of the Directors' service contracts are given in the Directors' Remuneration Report on page 91.

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 94.

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 Memorandum and 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 2019 and at the date of approval of the Group financial statements.

Share capital

At the date of this Report, 131,906,881 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 2019 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. 16 shares were allotted during the year and 2 treasury shares were cancelled.

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 2020 AGM, that is 23 April 2020, and so the Directors propose to renew them for a further year.

At last year's AGM the members renewed the Company's authority to purchase up to 10% of its Ordinary Shares. No purchases were made during the year. As a result the Company will be seeking to renew its authority to purchase its own shares at the 2020 AGM. Shares will only be purchased if the Board believes that such purchases will improve earnings per share and be in the best general interest of shareholders. It is the Company's intention that any shares purchased will be held as treasury shares. At the date of this report the Company holds 3,018,203 shares in treasury.

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. During 2019, 92% of our employees received training, totalling over 85,000 hours.

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 2019, 84% of our UK employees and 61.28% 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. In 2019 we held listening groups across all levels of our organisation to gain a deeper understanding of our people's feelings towards our business and used pulse surveys to test the temperature of the global organisation on particular topics.

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 30.

An indication of likely future developments in the Group's business can be found in the Strategic Report, starting on page 10.

An indication of the Company's overseas branches are on pages 156 to 157.

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 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 on the following pages of this Annual Report and Accounts as detailed 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 23 April 2020.

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.

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 (2018: £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 138 to 142.

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 120.

Section	Topic	Page reference
(1)	Capitalised interest	Page 100
(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	Not applicable
(7) (8)	Allotments of equity securities for cash	Page 99
(9)	Participation in a placing of equity securities	Not applicable
(10)	Contracts of significance	Page 100
(11) (14)	Controlling shareholder disclosures	Not applicable
(12) (13)	Dividend waiver	Page 98

Statement of Directors' responsibilities

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

Company law requires the Directors to prepare Group and parent Company financial statements for each financial year. Under that law they are required to prepare the Group financial statements in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs as adopted by the EU) and applicable law and have elected to prepare the parent Company financial statements in accordance with UK accounting standards, 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 their 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 IFRSs as adopted by the EU;
- 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 and Transparency Rules (DTR 4.1.8R). It was approved by the Board on 24 February 2020 and is signed on its behalf by

Tom Brophy
Group General Counsel and Company Secretary

24 February 2020

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 2019 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 115 to 121 and on page 151.

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 2019 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union;
- the parent Company financial statements have been properly prepared in accordance with UK accounting standards, including FRS 101 *Reduced Disclosure Framework*; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

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 two financial years ended 31 December 2019. We have fulfilled our ethical responsibilities under, and we remain independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

Overview

Materiality: Group financial statements as a whole	£15m (2018: £16m) 4.8% (2018: 5%) of normalised Group profit before tax
Coverage	79% (2018: 79%) of normalised Group profit before tax

Key audit matters

		vs 2018
Recurring risks	Valuation of defined benefit pension scheme liabilities	◀▶
	New: Goodwill valuation	▲
	Recoverability of parent company's intercompany receivables	◀▶

2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. We summarise below the key audit matters, in decreasing order of audit significance, in arriving at our audit opinion above, together with our key audit procedures to address those matters and, as required for public interest entities, our results from those procedures. These matters were addressed, and our results are based on procedures undertaken, in the context of, and solely for the purpose of, our audit of the financial statements as a whole, and in forming our opinion thereon, and consequently are incidental to that opinion, and we do not provide a separate opinion on these matters.

Group	The risk	Our response
Valuation of defined benefit pension scheme liabilities (Gross defined benefit obligation £1,441.7m; 2018: £1,268.7m) *Refer to page 68 (Audit Committee Report), page 118 (accounting policy) and note 11 on pages 128 to 131 (financial disclosures).*	**Subjective valuation:** • The Group has three defined benefit pension schemes that are material in the context of the overall balance sheet and the results of the Group. • Significant estimates, including the discount rate, the inflation rate and the mortality rate, are made in valuing the Group's defined benefit pension obligations (before deducting the schemes' assets).The UK scheme is still open to future accrual and new members, and small changes in the assumptions and estimates with respect to the obligation would have a significant effect on the financial position of the Group. The Group engages external actuarial specialists to assist them in selecting appropriate assumptions and calculate the obligations. • The effect of these matters is that, as part of our risk assessment, we determined that the valuation of the defined benefit obligations has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole, and possibly many times that amount. The financial statements (note 11) disclose the sensitivity estimated by the Group.	**Our procedures included:** • **Benchmarking assumptions:** challenged key assumptions applied (discount rate, inflation rate, and mortality rate) with the support of our own actuarial specialists, including a comparison of key assumptions against market data. • **Sensitivity analysis:** assessed the sensitivity of the defined benefit obligation to changes in certain assumptions. • **Actuary's credentials:** assessed the competence, independence and integrity of the Group's actuarial expert. • **Assessing transparency:** considered adequacy of the Group's disclosures in respect of the sensitivity of the net deficit to changes in key assumptions. **Our results** • We found the valuation of retirement benefit liabilities to be acceptable (2018 result: acceptable).

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

Group	The risk	Our response
Goodwill impairment (Goodwill: £348.5m, although the risk is only associated with the Sipo (£20.7m) and Biosector (£24.9m) Cash Generating Units). *Refer to page 68 (Audit Committee Report), page 116 (accounting policy) and note 12 on page 132 and 133 (financial disclosures).*	**Forecast based valuation:** • The Group has, over recent years, acquired a number of companies which has led to a material increase in the goodwill balance. Some of these acquisitions, and in particular Biosector, are still at an early stage of their integration into the Group and are therefore subject to greater levels of estimation uncertainty in respect of the underlying impairment model assumptions. • In addition, the headroom in respect of the impairment test on Sipo, a historic acquisition and separate Cash Generating Unit, is relatively small, and small changes in the assumptions and estimates applied in the value in use calculations could impact on management's conclusions about the carrying value of goodwill (£20.7m) and how this compares to the recoverable amount. • The effect of these matters is that, as part of our risk assessment, we determined that impairment assessments in respect of the Sipo and Biosector Cash Generating Units have a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole. The financial statements (note 12) disclose the sensitivities estimated by the Group.	**Our procedures included:** • **Assessing methodology:** obtained the discounted value in use cash flow models and assessed the methodology, principles and integrity of each model; • **Benchmark assumptions:** challenged the Group's forecast assumptions for cash flow projections, including the rate of short to medium term growth of EBITDA, the long term growth rates and the appropriateness of discount rates, with reference to internally and externally derived sources; • **Our valuation expertise:** involved our own valuation specialists in respect of the Sipo and Biosector models to assist us in challenging the appropriateness of the methodology, key assumptions and cash flow forecasts; • **Sensitivity analysis:** performed breakeven analysis on the key assumptions including the discount rate and growth rate; • **Historical comparisons:** assessed the Group's historical forecasting accuracy by comparing forecasts from prior years with actual results in those years; and • **Assessing transparency:** 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. **Our results** • We found the carrying amounts of the Sipo and Biosector goodwill, with no impairment, to be acceptable.

Parent Company	The risk	Our response
Recoverability of parent Company's intercompany receivables (£1,589.6m; 2018: £1,675.4m) *Refer to page 68 (Audit Committee Report), page 120 (accounting policy) and note H on page 153 (financial disclosures).*	**Low risk, high value:** • The carrying amount of the parent Company's intercompany receivables, held at cost less impairment, represents 72.3% of the Company's total assets. • We do not consider the recoverable amount of these receivables to be at a high risk of significant misstatement, or to be subject to a significant level of judgement. However, due to their materiality in the context of the Company financial statements as a whole, this is considered to be the area which had the greatest effect on our overall audit strategy and allocation of resources in planning and completing our company audit.	**Our procedures included:** • **Tests of detail:** Assessed the total receivable balance to identify, with reference to the relevant subsidiaries' draft balance sheet, whether they have a positive net asset value and therefore coverage of the debt owed, as well as assessing whether those subsidiaries have historically been profit-making. **Our results** • We found the Group's assessment of the recoverability of the intercompany receivables to be acceptable (2018: acceptable).

We continue to perform procedures over environmental provisions and taxation. However our risk assessment indicated that the ranges of potential outcomes have narrowed in the year, and so there is a reduction in both the size and complexity of these risks. We have not assessed these as being the most significant risks in our current year audit and, therefore, they are 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 £15.0m (2018: £16.0m), determined with reference to a benchmark of Group profit before tax, normalised to exclude this year's exceptional redundancy costs and related curtailment gain as disclosed in notes 3 and 11 of £311.5m (2018: profit before tax £317.8m), of which it represents 4.8% (2018: 5.0%).

Materiality for the parent Company financial statements as a whole was set at £8.7m (2018: £10.2m), determined with reference to a benchmark of company total assets of £2,198.5m (2018: £2,276.8m), of which it represents 0.4% (2018: 0.4%).

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £0.8m (2018: £0.8m), or £2.3m for reclassification misstatements, in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 81 (2018: 80) reporting components, we subjected 9 (2018: 8) to full scope audits for Group purposes and 7 (2018: 8) to specified risk-focused audit procedures. One component for which we performed specified risk-focused procedures was not individually financially significant enough to require an audit for Group reporting purposes, but did present specific individual risks that needed to be addressed. The other 6 (2018: 7) components for which we performed work other than audits for Group reporting purposes were not individually significant but were included in the scope of our Group reporting work in order to provide further coverage over the Group's results. We subjected these 7 (2018: 8) components to specified risk-focused audit procedures over a combination of revenue (5 components (2018: 6)), property, plant and equipment (1 component (2018: 2)) and defined benefit pension assets and liabilities (1 component (2018: 1)). The Group team performed procedures on the items excluded from normalised Group profit before tax. The components within the scope of our work accounted for 79% (2018: 79%) of the total profits and losses that made up Group profit before tax.

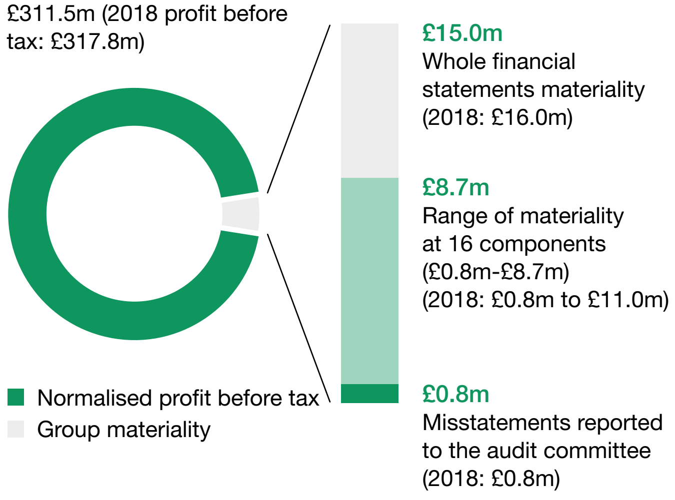
The remaining 24% of total Group revenue, 21% of Group profit before tax and 15% of total Group assets is represented by 64 (2018: 64) reporting components, none of which individually represented more than 2% (2018: 3%) of any of total Group revenue, Group profit before tax or total Group assets. For the residual components, we performed analysis at an aggregated Group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The Group team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back.
The Group team approved the component materialities, which ranged from £0.8m to £8.7m (2018: £0.8m to £11.0m), having regard to the mix of size and risk profile of the Group across the components. The work on 10 of the 16 (2018: 12 of 16) components was performed by component auditors in Germany, Italy, France, Singapore, Japan, Brazil, Spain, India and Denmark (2018: Germany, Italy, France, Singapore, Japan, Brazil, Spain, India, China and the Netherlands), and the rest, including the audit of the parent company, was performed by the Group team at locations in the UK and the USA. This year the Group team also performed procedures relating to the Chinese component.

The Group team visited one (2018: 3) component locations in France (2018: Singapore, France and Brazil), to assess the audit risk and strategy. Video and telephone conference meetings were also held with these component auditors and certain others that were not physically visited. At these visits and 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.

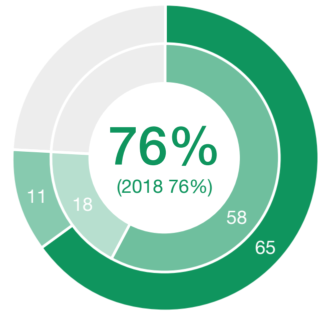
Normalised profit before tax
£311.5m (2018 profit before tax: £317.8m)

Group Materiality
£15.0m (2018: £16.0m)

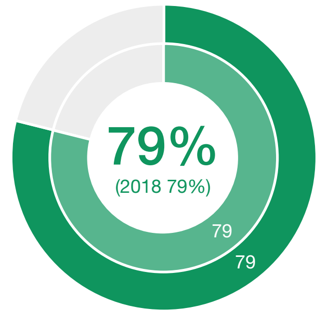


■ Normalised profit before tax
■ Group materiality

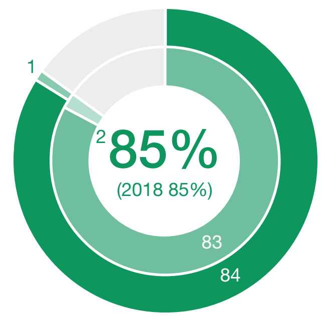
Group revenue



Group profit before tax



Group total assets



■ Full scope for group audit purposes 2019
■ Specified risk-focused audit procedures 2019
■ Full scope for group audit purposes 2018
■ Specified risk-focused audit procedures 2018
■ Residual components

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

4. We have nothing to report on going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Company or the Group or to cease their operations, and as they have concluded that the Company's and the Group'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").

Our responsibility is to conclude on the appropriateness of the Directors' conclusions and, had there been a material uncertainty related to going concern, to make reference to that in this audit report. 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 absence of reference to a material uncertainty in this auditor's report is not a guarantee that the Group and the Company will continue in operation.

In our evaluation of the Directors' conclusions, we considered the inherent risks to the Group's and Company's business model and analysed how those risks might affect the Group's and 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 Company's available financial resources over this period were:

- The impact of a significant business continuity issue affecting the Group's manufacturing facilities or those of its suppliers; and
- A potential significant legal settlement relating to a compliance breach such as an environmental issue.

As these were risks that could potentially cast significant doubt on the Group's and the Company's ability to continue as a going concern, we considered sensitivities over the level of available financial resources indicated by the Group's financial forecasts taking account of reasonably possible (but not unrealistic) adverse effects that could arise from these risks individually and collectively and evaluated the achievability of the actions the Directors consider they would take to improve the position should the risks materialise. We also considered less predictable but realistic second order impacts, such as the impact of Brexit and the erosion of customer or supplier confidence, which could result in a rapid reduction of available financial resources.

Based on this work, we are required to report to you if:

- we have anything material to add or draw attention to in relation to the Directors' statement in the Accounting Policies on pages 115 and 151 on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and Company's use of that basis for a period of at least twelve months from the date of approval of the financial statements; or
- the related statement under the Listing Rules set out on page 100 is materially inconsistent with our audit knowledge.

We have nothing to report in these respects, and we did not identify going concern as a key audit matter.

5. 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 principal risks and longer-term viability

Based on the knowledge we acquired during our financial statements audit, we have nothing material to add or draw attention to in relation to:

- the Directors' confirmation within the viability statement on page 43 that they have carried out a robust assessment of the 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 explaining how they are being managed and mitigated; and
- the Directors' explanation in the 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.

Under the Listing Rules we are required to review the viability statement. We have nothing to report in this respect.

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 Company's longer-term viability.

Corporate governance disclosures

We are required to report to you if:

- we have identified material inconsistencies between the knowledge we acquired during our financial statements audit and 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; or
- the section of the Annual Report describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.

We are required to report to you if the Corporate Governance Statement does not properly disclose a departure from the provisions of the UK Corporate Governance Code specified by the Listing Rules for our review.

We have nothing to report in these respects.

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

6. 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.

7. Respective responsibilities

Directors' responsibilities

As explained more fully in their statement set out on page 101, 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 other irregularities (see below), 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, other irregularities 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.

Irregularities – ability to detect

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 to component audit teams of relevant laws and regulations identified at group level.

The potential effect of these laws and regulations on the financial statements varies considerably.

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

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

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 (irregularities) 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 irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. We are not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations.

8. 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.

Chris Hearld (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
1 Sovereign Square
Sovereign Street
Leeds
LS1 4DA
24 February 2020

Group Consolidated Statements

Group Income Statement

for the year ended 31 December 2019

	Note	2019 Adjusted £m	2019 Adjustments £m	2019 Reported Total £m	2018 Adjusted £m	2018 Adjustments £m	2018 Reported Total £m
Revenue	1	1,377.7	–	1,377.7	1,386.9	–	1,386.9
Cost of sales		(865.5)	–	(865.5)	(864.6)	–	(864.6)
Gross profit		512.2	–	512.2	522.3	–	522.3
Operating costs	2	(172.5)	(19.8)	(192.3)	(179.8)	(13.7)	(193.5)
Operating profit	3	339.7	(19.8)	319.9	342.5	(13.7)	328.8
Financial costs	4	(18.5)	–	(18.5)	(12.1)	–	(12.1)
Financial income	4	0.9	–	0.9	1.1	–	1.1
Profit before tax		322.1	(19.8)	302.3	331.5	(13.7)	317.8
Tax	5	(82.4)	3.9	(78.5)	(81.6)	2.1	(79.5)
Profit after tax for the year		239.7	(15.9)	223.8	249.9	(11.6)	238.3
Attributable to:							
Non-controlling interests		(0.1)	–	(0.1)	(0.2)	–	(0.2)
Owners of the parent		239.8	(15.9)	223.9	250.1	(11.6)	238.5
		239.7	(15.9)	223.8	249.9	(11.6)	238.3

Adjustments relate to exceptional items, acquisition costs, 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	185.0		172.8	190.2		181.4
Diluted	7	184.6		172.4	189.2		180.4

Group Statement of Comprehensive Income

for the year ended 31 December 2019

	Note	2019 £m	2018 £m
Profit after tax for the year		223.8	238.3
Other comprehensive (expense)/income:			
Items that will not be reclassified subsequently to profit or loss:			
Remeasurements of post-retirement benefit obligations	11	(56.5)	22.6
Tax on items that will not be reclassified	5	8.4	(4.9)
		(48.1)	17.7
Items that may be reclassified subsequently to profit or loss:			
Currency translation		(34.7)	14.9
Other comprehensive (expense)/income for the year		(82.8)	32.6
Total comprehensive income for the year		141.0	270.9
Attributable to:			
Non-controlling interests		(0.5)	(0.1)
Owners of the parent		141.5	271.0
		141.0	270.9
Arising from:			
Continuing operations		141.0	270.9
		141.0	270.9

Group Balance Sheet

at 31 December 2019

	Note	2019 £m	2018 £m
Assets			
Non-current assets			
Intangible assets	12	445.3	454.9
Property, plant and equipment	13	805.2	780.3
Right of use assets	14	46.2	–
Investments	16	4.7	4.8
Deferred tax assets	6	11.8	56.2
Retirement benefit assets	11	10.2	24.6
		1,323.4	1,320.8
Current assets			
Inventories	17	268.9	287.2
Trade and other receivables	18	216.8	233.6
Cash and cash equivalents	20	81.9	71.2
		567.6	592.0
Liabilities			
Current liabilities			
Trade and other payables	19	(163.9)	(190.5)
Borrowings and other financial liabilities	20	(109.5)	(48.8)
Lease liabilities	14	(7.8)	(0.4)
Provisions	21	(10.9)	(4.0)
Current tax liabilities		(44.3)	(47.9)
		(336.4)	(291.6)
Net current assets		231.2	300.4
Non-current liabilities			
Borrowings and other financial liabilities	20	(476.6)	(446.9)
Lease liabilities	14	(35.7)	(0.6)
Other payables		(0.8)	(0.8)
Retirement benefit liabilities	11	(85.2)	(43.1)
Provisions	21	(5.3)	(7.1)
Deferred tax liabilities	6	(82.4)	(124.7)
		(686.0)	(623.2)
Net assets		868.6	998.0
Equity			
Ordinary share capital	22	14.0	14.0
Preference share capital	24	1.1	1.1
Share capital		15.1	15.1
Share premium account		93.3	93.3
Reserves		753.2	882.1
Equity attributable to owners of the parent		861.6	990.5
Non-controlling interests in equity	26	7.0	7.5
Total equity		868.6	998.0

The financial statements on pages 110 to 148 were signed on behalf of the Board who approved the accounts on 24 February 2020.

Anita Frew
Chair

Jez Maiden
Group Finance Director

Group Consolidated Statements continued

Group Statement of Cash Flows

for the year ended 31 December 2019

	Note	2019 £m	2018 £m
Cash generated from operating activities			
Cash generated by operations	ii	389.2	331.7
Interest paid		(17.0)	(14.7)
Tax paid		(68.3)	(55.0)
Net cash generated from operating activities		303.9	262.0
Cash flows from investing activities			
Acquisition of subsidiaries	28	(3.7)	(79.3)
Acquisition of associates and other investments	16	(1.3)	(3.2)
Purchase of property, plant and equipment	13	(105.2)	(100.2)
Purchase of other intangible assets	12	(5.8)	(3.4)
Proceeds from sale of property, plant and equipment		4.2	0.5
Proceeds from sale of other investments		–	0.4
Cash paid against non-operating provisions	21	(1.1)	(1.0)
Interest received		0.9	1.1
Net cash used in investing activities		(112.0)	(185.1)
Cash flows from financing activities			
New borrowings		752.5	437.1
Repayment of borrowings		(637.1)	(421.9)
Payment of lease liabilities (2018: Capital element of finance lease repayments)	14	(8.8)	(0.5)
Net transactions in own shares		(4.3)	0.4
Dividends paid to equity shareholders	8	(266.9)	(110.5)
Net cash used in financing activities		(164.6)	(95.4)
Net movement in cash and cash equivalents	i,iii	27.3	(18.5)
Cash and cash equivalents brought forward		40.3	54.9
Exchange differences	iii	(4.5)	3.9
Cash and cash equivalents carried forward		63.1	40.3
Cash and cash equivalents carried forward comprise:			
Cash at bank and in hand		81.9	71.2
Bank overdrafts		(18.8)	(30.9)
		63.1	40.3

Group Cash Flow Notes

for the year ended 31 December 2019

(i) Reconciliation to net debt

	Note	2019 £m	2018 £m
Net movement in cash and cash equivalents	iii	27.3	(18.5)
Net movement in borrowings and other financial liabilities	iii	(106.6)	(14.7)
Change in net debt from cash flows		(79.3)	(33.2)
Non-cash movement in lease liabilities		(52.9)	(0.7)
Exchange differences		10.0	(10.1)
		(122.2)	(44.0)
Net debt brought forward		(425.5)	(381.5)
Net debt carried forward	iii	(547.7)	(425.5)

(ii) Cash generated by operations

	Note	2019 £m	2018 £m
Adjusted operating profit		339.7	342.5
Exceptional items	iv	(10.7)	(4.9)
Acquisition costs and amortisation of intangible assets arising on acquisition		(9.1)	(8.8)
Operating profit		319.9	328.8
Adjustments for:			
Depreciation and amortisation		66.4	56.2
Impairments		1.4	–
Profit on disposal of property, plant and equipment		(3.8)	(0.1)
Net provisions charged (note 21)		10.5	–
Share-based payments		(5.2)	8.3
Non-cash pension expense		1.6	8.7
Share of loss of associate		0.8	0.2
Cash paid against operating provisions (note 21)		(4.0)	(1.1)
Movement in inventories		12.2	(22.2)
Movement in receivables		8.3	(26.3)
Movement in payables		(18.9)	(20.8)
Cash generated by continuing operations		389.2	331.7

(iii) Analysis of net debt

	2019 £m	Cash flow £m	Exchange movements £m	Other non-cash £m	2018 £m
Cash and cash equivalents	81.9	15.2	(4.5)	–	71.2
Bank overdrafts	(18.8)	12.1	–	–	(30.9)
Movement in cash and cash equivalents		27.3	(4.5)	–	
Borrowings repayable within one year	(90.7)	2.8	3.2	(78.8)	(17.9)
Borrowings repayable after more than one year	(476.6)	(118.2)	9.7	78.8	(446.9)
Lease liabilities (2018: Finance leases)	(43.5)	8.8	1.6	(52.9)	(1.0)
Movement in borrowings and other financial liabilities		(106.6)	14.5	(52.9)	
Total net debt	(547.7)	(79.3)	10.0	(52.9)	(425.5)

Included within other non-cash movements are £46.0m of lease liabilities recognised on initial application of IFRS 16.

(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 £4.5m (2018: £2.1m). Details of exceptional items can be found in note 3 on page 123.

Group Consolidated Statements continued

Group Statement of Changes in Equity

for the year ended 31 December 2019

	Note	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Non controlling interests £m	Total equity £m
At 1 January 2018		15.1	93.3	53.9	660.0	7.6	829.9
Profit after tax for the year		–	–	–	238.5	(0.2)	238.3
Other comprehensive income		–	–	14.8	17.7	0.1	32.6
Total comprehensive income/(expense) for the year		–	–	14.8	256.2	(0.1)	270.9
Transactions with owners:							
Dividends on equity shares	8	–	–	–	(110.5)	–	(110.5)
Share-based payments		–	–	–	7.3	–	7.3
Transactions in own shares		–	–	–	0.4	–	0.4
Total transactions with owners		–	–	–	(102.8)	–	(102.8)
Total equity at 31 December 2018		15.1	93.3	68.7	813.4	7.5	998.0
At 1 January 2019		15.1	93.3	68.7	813.4	7.5	998.0
Profit after tax for the year		–	–	–	223.9	(0.1)	223.8
Other comprehensive expense		–	–	(34.3)	(48.1)	(0.4)	(82.8)
Total comprehensive (expense)/income for the year		–	–	(34.3)	175.8	(0.5)	141.0
Transactions with owners:							
Dividends on equity shares	8	–	–	–	(266.9)	–	(266.9)
Share-based payments		–	–	–	0.8	–	0.8
Transactions in own shares		–	–	–	(4.3)	–	(4.3)
Total transactions with owners		–	–	–	(270.4)	–	(270.4)
Total equity at 31 December 2019		15.1	93.3	34.4	718.8	7.0	868.6

Other reserves include the Capital Redemption Reserve of £0.9m (2018: £0.9m) and the Translation Reserve of £33.5m (2018: £67.8m).

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 International Financial Reporting Standards Interpretations Committee (IFRSIC) and the Companies Act 2006 applicable to companies reporting under IFRS. The standards used are those published by the International Accounting Standards Board (IASB) and endorsed by the EU as at 31 December 2019. A summary of the more important Group accounting policies is set out below.

Going concern

The financial statements which appear on pages 110 to 148 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 Group has adequate resources to continue in operational existence.

Critical accounting judgements and key sources of estimation uncertainty

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

The critical accounting judgements required when preparing the Group's accounts are as follows:

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

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

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

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

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

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

Group Accounting Policies continued

Changes in accounting policy

(i) New and amended standards adopted by the Group for the first time for the financial year beginning on 1 January 2019:

IFRS 16 'Leases' requires lessees to recognise a lease liability reflecting future lease payments and a right of use asset for virtually all lease contracts. It replaces IAS 17, under which lessees were required to make a distinction between a finance lease (on balance sheet) and an operating lease (off balance sheet). IFRS 16 includes optional exemptions which can be applied for certain short-term and low value leases.

The net impact of the new standard on the Group's profit or financial gearing is not material. Accordingly, the Group has adopted the simplified approach permitted under IFRS 16 and has therefore not restated prior year comparators and no adjustment has been recognised in the opening balance of equity at the date of initial application. Right of use asset values were set equal to lease liabilities at the date of transition. The Group has adopted recognition exemptions for short-term and low value leases and has elected to apply the practical expedient available for all leases which end within 12 months of the date of transition (accounting for as short-term leases).

On initial application, the Group recorded right of use assets and lease liabilities with a value of £46.0m. This exceeded the £35.6m non-cancellable lease commitments reported as at 31 December 2018 under IAS 17 due to extension options reasonably certain to be exercised, partly offset by the application of short-term and low value exemptions. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 2%.

IFRIC 23 'Uncertainty over Income Tax Treatments' came into effect from 1 January 2019. The Group has adopted IFRIC 23 in its financial statements for the year ended 31 December 2019. The application of IFRIC 23 did not affect the recognition or measurement of uncertain tax treatments because the Group's previous accounting policy was consistent with the guidance in IFRIC 23.

(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 2020 and have not been applied in preparing these consolidated financial statements. None of these are expected to have a significant effect on the consolidated financial statements of the Group.

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 160.

Subsidiaries

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

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

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

Intra-group transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Transactions with non-controlling interests

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

Intangible assets
Goodwill

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

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

Other intangible assets arising on acquisition

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

Once recognised, such intangible assets will be initially valued using either the 'market approach' (where a well-defined external market for the asset exists), the 'income approach' (which looks at the future income the asset will generate) or the 'cost approach' (the cost of replacing the asset), whichever is most relevant to the asset under consideration. Following initial recognition, the asset will be written down on a straight-line basis over its useful life, which range from 7 to 14 years for technology processes and trade secrets and from 6 to 20 years for trade names and customer relationships. Useful lives are regularly reviewed to ensure their continuing relevance.

Research and development

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

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

Computer software

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

Revenue recognition

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

Sale of goods

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

Royalties and profit sharing arrangements

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

Interest and dividend income

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

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

Segmental reporting

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

Group Accounting Policies continued

Employee benefits

Pension obligations

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

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

Other post-retirement benefits

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

Termination benefits

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

Share-based payments

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

Currency translations

Functional and presentation currency

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

Transactions and balances

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

Group companies

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

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

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

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

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

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

Taxation

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

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

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

Exceptional items

Exceptional items are those items that in the Directors' view are required to be separately disclosed by virtue of their size or incidence to enable a full understanding of the Group's financial performance. In the current year exceptional items relate to the delivery of cost saving actions, comprising redundancy and other restructuring costs (including an associated curtailment gain on defined benefit pension schemes and related impairments). Exceptional items in the prior year related to a past service cost for the UK defined benefit pension scheme to equalise benefits for the effects of unequal Guaranteed Minimum Pensions. Details can be found in note 3 on page 123.

Income statement presentation

The acquisition of Nautilus Biosciences Canada Inc, Plant Impact Plc and Brenntag Biosector A/S in 2018 and Rewitec GmbH in 2019 increased acquisition costs and amortisation of acquired intangible assets. If the right targets can be found, these costs are likely to increase in the future.

To avoid distorting the underlying trend in profitability, the Group adopts the definitions 'Adjusted operating profit', 'Adjusted profit before tax' and 'Adjusted earnings per share'. In each case acquisition costs, amortisation of intangible assets arising on acquisition and exceptional items, including the respective tax effect, are excluded. The Group income statement has been produced in a columnar format to further aid this analysis.

Property, plant and equipment

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

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

Impairment of non-financial assets

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

Leases

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

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

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

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

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

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

Group Accounting Policies continued

Derivative financial instruments
The Group uses derivative financial instruments where deemed appropriate to hedge its exposure to interest rates and short term currency rate fluctuations. There were no such transactions recorded in the current or prior year however the Group's accounting policy is set out below.

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

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

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

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

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

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

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

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

Trade and other payables
Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

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

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

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

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

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

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

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

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

Notes to the Group Accounts

1. Segmental analysis

The Group's sales, marketing and research activities are organised into four global market sectors, being Personal Care, Life Sciences, Performance Technologies and Industrial Chemicals. These are the segments for which summary management information is presented to the Group's Executive Committee, which is deemed to be the Group's Chief Operating Decision Maker. A review of each sector can be found within the Strategic Report on pages 22 to 28.

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

	2019 £m	2018 £m
Income statement		
Revenue		
Personal Care	485.2	487.8
Life Sciences	350.5	324.5
Performance Technologies	430.2	456.4
Industrial Chemicals	111.8	118.2
Total Group revenue	1,377.7	1,386.9
Adjusted operating profit		
Personal Care	162.1	160.3
Life Sciences	107.1	95.8
Performance Technologies	69.4	85.2
Industrial Chemicals	1.1	1.2
Total Group operating profit (before exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition)	339.7	342.5
Exceptional items, acquisition costs and amortisation of intangible assets arising on acquisition[1]	(19.8)	(13.7)
Total Group operating profit	319.9	328.8

1 Relates to Personal Care £3.9m (2018: £3.7m), Life Sciences £9.4m (2018: £6.1m), Performance Technologies £5.6m (2018: £3.5m) and Industrial Chemicals £0.9m (2018: £0.4m)

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

	Europe £m	North America £m	Latin America £m	Asia £m	Total £m
Revenue 2019					
Personal Care	168.4	143.1	55.1	118.6	485.2
Life Sciences	138.1	98.3	58.6	55.5	350.5
Performance Technologies	200.4	112.9	27.6	89.3	430.2
Industrial Chemicals	52.0	13.1	2.5	44.2	111.8
Total Group revenue	558.9	367.4	143.8	307.6	1,377.7
Revenue 2018					
Personal Care	165.7	143.1	57.8	121.2	487.8
Life Sciences	128.6	94.6	50.3	51.0	324.5
Performance Technologies	217.4	124.3	30.6	84.1	456.4
Industrial Chemicals	60.7	10.7	2.3	44.5	118.2
Total Group revenue	572.4	372.7	141.0	300.8	1,386.9

	2019 £m	2018 £m
Balance sheet		
Total assets		
Segment total assets:		
Personal Care	560.3	611.3
Life Sciences	568.2	493.7
Performance Technologies	501.0	480.2
Industrial Chemicals	152.9	170.8
Total segment assets	1,782.4	1,756.0
Tax assets	11.8	56.2
Retirement benefit assets	10.2	24.6
Cash and investments	86.6	76.0
Total Group assets	1,891.0	1,912.8

Capital expenditure and depreciation

	2019 £m		2018 £m	
	Additions to non-current assets	Depreciation and amortisation	Additions to non-current assets	Depreciation and amortisation
Personal Care	34.5	18.4	29.9	14.7
Life Sciences	32.2	21.0	26.1	15.5
Performance Technologies	45.1	21.3	41.9	20.5
Industrial Chemicals	10.8	5.7	9.0	5.5
Total Group	122.6	66.4	106.9	56.2

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 and Argentina; Asia, with manufacturing sites in Singapore, Japan, India, China and Indonesia; and Australia and South Africa.

The Group's revenue from external customers in the UK is £58.6m (2018: £55.4m), in Germany is £100.0m (2018: £113.0m), in the US is £332.9m (2018: £343.2m) and the total revenue from external customers from other countries is £886.2m (2018: £875.3m). No single external customer represents more than 3% of the total revenue of the Group.

The total of non-current assets other than financial instruments, retirement benefit assets and deferred tax assets located in the UK is £137.0m (2018: £119.6m), and the total of the non-current assets located in other countries is £815.9m (2018: £766.4m). Goodwill has not been split by geography as this asset is not attributable to a geographical area.

2. Operating costs

	2019 £m	2018 £m
Analysis of net operating expenses by function:		
Distribution costs	65.9	65.8
Administrative expenses	126.4	127.7
	192.3	193.5

Additional information on the nature of operating expenses, including depreciation and employee costs, is provided in note 3.

3. Profit for the year

	2019 £m	2018 £m
The Group profit for the year is stated after charging/(crediting):		
Depreciation and amortisation (note 12, 13 & 14)	66.4	56.2
Impairments (exceptional)	1.4	–
Staff costs (note 9)	268.9	267.1
Redundancy costs (non-exceptional)	0.8	1.1
Redundancy costs (exceptional)	10.4	–
Inventories – cost recognised as expense in cost of sales	746.5	747.5
Inventories – provision movement in the year	3.4	(1.7)
Research and development	37.6	37.5
Net foreign exchange	3.4	0.9
Bad debt charge/(credit) (note 18)	0.2	(1.7)

Adjustments (including exceptional items):

Adjustments in the Group income statement of £19.8m (2018: £13.7m) include a £10.7m exceptional cost (2018: £4.9m), acquisition costs of £0.3m (2018: £2.7m) and amortisation of intangible assets arising on acquisition of £8.8m (2018: £6.1m). The exceptional item in the current year relates to the delivery of cost saving actions, comprising £10.4m of redundancy costs and £0.3m of other restructuring costs (including an associated curtailment gain on defined benefit pension schemes of £1.2m and related impairments of £1.4m). All items associated with delivering the cost savings have been presented collectively as exceptional by virtue of their size and nature. The exceptional cost in the prior year related to the UK defined benefit pension scheme, being a past service cost to equalise benefits for the effects of unequal Guaranteed Minimum Pensions. The tax impact on all adjustments was £3.9m (2018: £2.1m).

	2019 £m	2018 £m
Services provided by the Group's auditors		
Audit services		
Fees payable to the Group auditors for the audit of Parent Company and consolidated financial statements	0.1	0.1
Fees payable to the Group auditors and its associates for the audit of the Company's subsidiaries	0.9	0.8
Other audit services		
Tax compliance services	–	0.1
Other non-audit services[1]	0.1	–
	1.1	1.0

1 Other non-audit services include fees payable in relation to the Group's interim review

Notes to the Group Accounts continued

4. Net financial costs

	2019 £m	2018 £m
Financial costs		
US$100m 5.94% fixed rate 10 year bond	4.6	4.5
2014 Club facility due 2021	0.8	2.5
2016 Club facility due 2021	0.2	–
2019 Club facility due 2024	3.3	–
€30m 1.08% fixed rate 7 year bond	0.3	0.3
€70m 1.43% fixed rate 10 year bond	0.9	0.9
£30m 2.54% fixed rate 7 year bond	0.8	0.8
£70m 2.80% fixed rate 10 year bond	2.0	2.0
€50m 1.18% fixed rate 8 year bond	0.3	–
£65m 2.46% fixed rate 8 year bond	0.9	–
US$60m 3.70% fixed rate 10 year bond	0.9	–
Net interest on retirement benefit liabilities	0.3	0.6
Interest on lease liabilities	1.0	–
Other bank loans and overdrafts	2.2	3.8
Capitalised interest	–	(3.3)
	18.5	12.1
Financial income		
Bank interest receivable and similar income	(0.9)	(1.1)
Net financial costs	17.6	11.0

5. Tax

	2019 £m	2018 £m
(a) Analysis of tax charge for the year		
UK current corporate tax	15.1	15.0
Overseas current corporate taxes	50.5	42.1
Current tax	65.6	57.1
Deferred tax (note 6)	12.9	22.4
	78.5	79.5
(b) Tax on items (credited)/charged to other comprehensive income or equity		
Deferred tax on remeasurement of post-retirement benefits (OCI)	(8.4)	4.9
Deferred tax on share-based payments (equity)	(0.7)	(0.8)
	(9.1)	4.1
(c) Factors affecting the tax charge for the year		
Profit before tax	302.3	317.8
Tax at the standard rate of corporation tax in the UK, 19.0% (2018: 19.0%)	57.4	60.4
Effect of:		
Deferred tax rate change	–	(0.9)
Prior year over provisions	(2.1)	(2.4)
Tax cost of remitting overseas income to the UK	0.8	0.6
Expenses and write-offs not deductible for tax purposes	1.4	0.6
Net effect of higher overseas tax rates	21.0	21.2
	78.5	79.5

Croda's 2019 effective adjusted corporate tax rate of 25.6% is significantly higher than the UK's standard rate of 19%. Croda operates in many tax jurisdictions other than the UK, both as a manufacturer and distributor, with the majority of those jurisdictions having rates higher than the UK; considerably so in some cases. It is the exposure to these different tax rates that increases the effective tax rate above the UK standard rate and also makes it difficult to forecast the Group's future tax rate with any certainty given the unpredictable nature of exchange rates, individual economies and tax legislators. Other than the exposure to higher overseas tax rates, there are no significant adjustments between the Group's expected and reported tax charge based on its accounting profit. Given the global nature of the Group, and the number of associated cross-border transactions between connected parties, we are exposed to potential adjustments to the price charged for those transactions by tax authorities. However, the Group carries appropriate provisions relating to the level of risk.

The main rate of UK corporation tax reduced from 20% to 19% from 1 April 2017. Further reductions to the UK tax rate have been announced that will reduce the rate to 17% by 1 April 2020, although for 2019 the rate is 19%. The future changes to rates were substantively enacted on 6 September 2016. Overseas tax is calculated at the rates prevailing in the respective jurisdictions.

6. Deferred tax

	2019 £m	2018 £m
The deferred tax balances included in these accounts are attributable to the following:		
Deferred tax assets		
Retirement benefit liabilities	17.2	10.2
Tax losses	–	24.4
Provisions	21.6	21.6
Gross deferred tax asset	38.8	56.2
Offset with deferred tax liabilities	(27.0)	–
Net deferred tax asset	11.8	56.2
Deferred tax liabilities		
Accelerated capital allowances	86.6	98.4
Revaluation gains	1.9	1.9
Acquired intangibles	17.6	19.2
Retirement benefit assets	2.3	4.1
Other	1.0	1.1
Gross deferred tax liability	109.4	124.7
Offset with deferred tax assets	(27.0)	–
Net deferred tax liability	82.4	124.7
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	(16.1)	(24.5)
Adjustments and exceptional items	3.2	2.1
Deferred tax credited/(charged) directly to other comprehensive income or equity (note 5(b))	9.1	(4.1)
Acquisitions	(1.1)	(8.9)
Exchange differences	2.8	(2.8)
	(2.1)	(38.2)
Net balance brought forward	(68.5)	(30.3)
Net balance carried forward	(70.6)	(68.5)
Deferred tax credited/(charged) through the income statement relates to the following:		
Retirement benefit obligations	0.8	1.3
Accelerated capital allowances	9.1	(48.4)
Tax losses	(23.2)	23.2
Provisions	(1.4)	0.3
Other	1.8	1.2
	(12.9)	(22.4)

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 2020 and beyond has been measured using the rate due to prevail in the year of reversal.

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

Deferred tax is only recognised on the unremitted earnings of overseas subsidiaries to the extent that remittance is expected in the foreseeable future. If all earnings were remitted, an additional £6.4m (2018: £3.0m) 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, £4.7m 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.

In 2019, deferred tax assets and liabilities have been offset if a legally enforceable right to set off current tax balances exists, and the deferred tax balances relate to the same tax authority. Following a review of the 2018 balances, £22.9m of deferred tax assets and liabilities should have been offset to align with the current year's presentation. In addition, the gross deferred tax balances in respect of the prior year were reassessed following the submission of the 2018 US tax returns, resulting in a reduction of £23.6m in both the tax losses asset and accelerated capital allowances liability, with no change to the net deferred tax position. Given these changes have no impact on the Group's net assets, results or cash flows for the prior year, we do not consider this material and so have not restated the comparative balance sheet.

Notes to the Group Accounts continued

7. Earnings per share

	2019 £m	2018 £m
Adjusted profit after tax for the year attributable to owners of the parent	239.8	250.1
Exceptional items, acquisition costs and amortisation of intangible assets	(19.8)	(13.7)
Tax impact of exceptional items, acquisition costs and amortisation of intangible assets	3.9	2.1
Profit after tax for the year attributable to owners of the parent	223.9	238.5

	Number m	Number m
Weighted average number of 10.61p (2018: 10.36p) ordinary shares in issue for basic calculation	129.6	131.5
Deemed issue of potentially dilutive shares	0.3	0.7
Average number of 10.61p (2018: 10.36p) ordinary shares for diluted calculation	129.9	132.2

	Pence	Pence
Basic earnings per share	172.8	181.4
Adjusted basic earnings per share	185.0	190.2
Diluted earnings per share	172.4	180.4
Adjusted diluted earnings per share	184.6	189.2

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	2019 £m	Pence per share	2018 £m
Ordinary				
Interim				
2018 interim, paid October 2018	–	–	38.00	50.0
2019 interim, paid October 2019	39.50	50.7	–	–
Final				
2017 final, paid May 2018	–	–	46.00	60.4
2018 final, paid May 2019	49.00	64.6	–	–
2018 special, paid May 2019	115.00	151.5	–	–
	203.50	266.8	84.00	110.4
Preference (paid June and December)		0.1		0.1
		266.9		110.5

The Directors are recommending a final dividend of 50.5p per share, amounting to a total of £65.0m, in respect of the financial year ended 31 December 2019.

Subject to shareholder approval, the dividend will be paid on 28 May 2020 to shareholders registered on 17 April 2020 and has not been accrued in these financial statements. The total dividend for the year ended 31 December 2019 will be 90.0p per share amounting to a total of £115.7m.

9. Employees

	2019 £m	2018 £m
Group employment costs including Directors		
Wages and salaries	202.1	192.4
Share-based payment charges (note 23)	5.1	15.1
Social security costs	36.2	35.3
Post-retirement benefit costs	25.5	24.3
Redundancy costs	11.2	1.1
	280.1	268.2

	2019 Number	2018 Number
Average employee numbers by function		
Production	2,851	2,755
Selling and distribution	1,134	1,089
Administration	647	619
	4,632	4,463

As required by the Companies Act 2006, the figures disclosed above are weighted averages based on the number of employees at each quarter end and include Executive Directors. At 31 December 2019, the Group had 4,580 (2018: 4,580) employees in total.

10. Directors' and key management compensation

Detailed information concerning Directors' remuneration, interests and options is shown in the Directors' Remuneration Report, which is subject to audit, on pages 71 to 97 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:

	2019 £m	2018 £m
Key management compensation including Directors		
Short term employee benefits	4.6	5.6
Post-retirement benefit costs	0.1	0.1
Share-based payment (credit)/charge	(0.3)	3.6
	4.4	9.3

Notes to the Group Accounts continued

11. Post-retirement benefits

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

	2019 £m	2018 £m
Balance sheet:		
Retirement benefit assets	10.2	24.6
Retirement benefit liabilities	(85.2)	(43.1)
Net liability in Group balance sheet	(75.0)	(18.5)
Net balance sheet liabilities for:		
Defined pension benefits	(60.9)	(6.0)
Post-employment medical benefits	(14.1)	(12.5)
	(75.0)	(18.5)
Income statement charge included in profit before tax for:		
Defined pension benefits	18.2	23.9
Post-employment medical benefits	0.5	0.9
	18.7	24.8
Remeasurements included in other comprehensive income for:		
Defined pension benefits	54.7	(20.3)
Post-employment medical benefits	1.8	(2.3)
	56.5	(22.6)

Defined benefit pension schemes

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

The UK scheme operated on a final salary basis until 5 April 2016, following which the scheme changed to a Career Average Revalued Earnings (CARE) defined benefit scheme, with annual pensionable earnings capped and pensions in payment indexed based on CPI (previously RPI) for service accrued from 6 April 2016. This change is expected to reduce the future comparable cost and risk attached to the UK scheme. Material defined benefit pension schemes in other territories, including the Netherlands, operate on a similar basis to the UK, except in the US, which (other than for 'grandfathered' employees) operates a cash balance pension scheme that provides a guaranteed rate of return on pension contributions until retirement. From 1 October 2017 the US scheme was closed to new joiners, who will receive defined contribution benefits. The US plans also do not generally receive inflationary increases once in payment. With the exception of this difference in inflationary risk, the Group's main defined benefit pension schemes continue to face broadly similar risks, as described on page 131.

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.

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

	2019 £m	2018 £m
Present value of funded obligations		
UK pension scheme	(1,104.2)	(961.6)
US pension scheme	(132.3)	(126.1)
Netherlands pension scheme	(188.2)	(165.5)
Rest of world	(17.0)	(15.5)
	(1,441.7)	(1,268.7)
Fair value of schemes' assets		
UK pension scheme	1,063.5	986.0
US pension scheme	141.5	124.1
Netherlands pension scheme	171.1	149.7
Rest of world	14.7	12.9
	1,390.8	1,272.7
Net (liability)/asset in respect of funded schemes	(50.9)	4.0
Present value of unfunded obligations	(10.0)	(10.0)
Net liability in Group balance sheet (excluding post-employment medical benefits)	(60.9)	(6.0)

	2019 £m	2018 £m
Movement in present value of retirement benefit obligations in the year:		
Opening balance	1,278.7	1,321.9
Current service cost	19.6	18.9
Past service cost – plan amendments	(0.3)	4.9
Past service cost – curtailments	(0.9)	–
Interest cost	33.9	31.5
Remeasurements		
Change in demographic assumptions	(8.0)	6.3
Change in financial assumptions	174.0	(76.0)
Experience gains	11.1	(1.8)
Contributions paid in		
Employee	2.8	2.8
Benefits paid	(43.6)	(40.7)
Exchange differences on overseas schemes	(15.6)	10.9
	1,451.7	1,278.7
Movement in fair value of schemes' assets in the year:		
Opening balance	1,272.7	1,304.8
Interest income	34.1	31.4
Remeasurements		
Return on scheme assets, excluding amounts included in financial expenses	122.4	(51.2)
Contributions paid in		
Employee	2.8	2.8
Employer	16.3	15.2
Benefits paid out including settlements	(43.6)	(40.7)
Exchange differences on overseas schemes	(13.9)	10.4
	1,390.8	1,272.7

As at the balance sheet date, the present value of retirement benefit obligations comprised approximately £438m in respect of active employees, £403m in respect of deferred members and £611m in relation to members in retirement.

Total employer contributions to the schemes in 2020 are expected to be £14.8m.

The actuarial assumptions were as follows:

	2019 UK	2019 US	2019 Netherlands	2018 UK	2018 US	2018 Netherlands
Discount rate	1.9%	3.2%	1.2%	2.7%	4.2%	1.9%
Inflation rate – RPI	3.0%	2.5%	1.8%	3.2%	2.5%	1.8%
Inflation rate – CPI	2.2%	n/a	n/a	2.2%	n/a	n/a
Rate of increase in salaries	4.2%	3.5%	2.4%	4.2%	4.0%	2.4%
Rate of increase for pensions in payment	2.8%	n/a	1.3%	3.0%	n/a	1.3%
Duration of liabilities (ie life expectancy) (years)	20.5	11.1	22.4	20.0	10.8	21.8
Remaining working life	14.7	10.1	12.9	12.7	10.9	13.4

Notes to the Group Accounts continued

11. Post-retirement benefits continued

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

	Current age 65 UK	Current age 65 US	Current age 65 Netherlands	Age 65 in 20 years UK	Age 65 in 20 years US	Age 65 in 20 years Netherlands
Male	21.6	21.0	22.2	23.1	22.4	23.8
Female	24.1	22.9	24.6	25.7	24.3	26.1

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

	Impact on retirement benefit obligation Sensitivity	Of increase	Of decrease
Discount rate	0.5%	-9.2%	10.7%
Inflation rate	0.5%	6.5%	-6.2%
Mortality (assumes a one year change in life expectancy)	1 year	3.0%	-3.0%

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

The weighted average duration of the defined benefit obligation is 19.8 years (2018: 19.3 years).

The assets in the schemes comprised:

	2019 £m	2019 %	2018 £m	2018 %
Quoted				
Equities	240.7	17%	232.9	19%
Government bonds	584.2	42%	532.2	42%
Corporate bonds	77.9	6%	115.0	9%
Other quoted securities	11.3	1%	–	0%
Unquoted				
Cash and cash equivalents	127.3	9%	43.3	3%
Real estate	57.5	4%	68.6	5%
Derivatives	1.2	0%	4.3	0%
Other	290.7	21%	276.4	22%
	1,390.8	100%	1,272.7	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. This presentation has been amended to be consistent in both years.

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 (2018: 5.0%).

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

	2019 £m	2018 £m
Present value of unfunded obligations		
US scheme	14.1	12.5

	2019 £m	2018 £m
Movement in present value of retirement benefit obligations in the year:		
Opening balance	12.5	13.4
Current service cost	0.3	0.4
Past service cost – curtailments	(0.3)	–
Interest cost	0.5	0.5
Remeasurements – change in demographic assumptions	(0.1)	0.1
Remeasurements – change in financial assumptions	1.9	(2.4)
Benefits paid	(0.3)	(0.3)
Exchange differences on overseas schemes	(0.4)	0.8
	14.1	12.5

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 2019 consist of equities and bonds, although the schemes also invest in property, cash and infrastructure funds. The Group believes that equities offer the best returns over the long-term with an acceptable level of risk. Both the UK and Dutch schemes make use of a portfolio of derivative instruments to mitigate interest rate and inflation risk.

The latest triennial valuation of the UK scheme was completed as at 30 September 2017. As a result, no deficit funding payments to this scheme were required prior to completion of the next triennial valuation (as at 30 September 2020). The funding review of our US scheme is undertaken annually. As at 1 December 2018 the scheme was 127% funded, with the funding level allowing for contributions to be received during 2019. The Group's Dutch scheme is subject to a rigorous regulatory environment under the supervision of the Dutch National Bank (DNB). As at 31 December 2019 the scheme was 111% funded on an actuarial basis relative to the DNB's required level of 119% and a minimum funding requirement of 104%.

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

	Less than a year £m	Between 1–2 years £m	Between 2–5 years £m	Beyond 5 years £m	Total £m
Pension benefits	40.0	39.5	131.6	1,240.6	1,451.7
Post-employment medical benefits	0.6	0.6	1.9	11.0	14.1
	40.6	40.1	133.5	1,251.6	1,465.8

Defined contribution schemes

	2019 £m	2018 £m
Contributions paid charged to operating profit	5.6	5.0

12. Intangible assets

	Goodwill £m	Software £m	Technology processes £m	Customer relationships £m	Other intangibles £m	Total £m
Cost						
At 1 January 2018	320.2	22.4	30.8	26.3	9.3	409.0
Exchange differences	1.2	0.6	0.4	0.4	0.1	2.7
Additions	–	2.4	0.1	–	0.9	3.4
Acquisitions	32.6	–	28.2	10.2	–	71.0
Reclassification from plant and equipment	–	0.3	–	–	–	0.3
At 31 December 2018	354.0	25.7	59.5	36.9	10.3	486.4
At 1 January 2019	354.0	25.7	59.5	36.9	10.3	486.4
Exchange differences	(7.5)	(1.1)	(3.2)	(1.9)	(0.4)	(14.1)
Additions	–	4.7	–	1.1	–	5.8
Acquisitions	2.1	–	5.4	–	–	7.5
Disposals and write-offs	–	(0.1)	–	–	–	(0.1)
Reclassification	(0.1)	0.3	–	–	(0.2)	–
At 31 December 2019	348.5	29.5	61.7	36.1	9.7	485.5
Accumulated amortisation and impairment losses						
At 1 January 2018	–	14.5	3.8	2.8	1.6	22.7
Exchange differences	–	0.4	0.2	0.1	–	0.7
Charge for the year (note 3)	–	1.8	4.4	1.4	0.5	8.1
At 31 December 2018	–	16.7	8.4	4.3	2.1	31.5
At 1 January 2019	–	16.7	8.4	4.3	2.1	31.5
Exchange differences	–	(1.0)	(0.8)	(0.2)	–	(2.0)
Charge for the year (note 3)	–	1.9	6.0	2.3	0.6	10.8
Disposals and write-offs	–	(0.1)	–	–	–	(0.1)
At 31 December 2019	–	17.5	13.6	6.4	2.7	40.2
Net carrying amount						
At 31 December 2019	348.5	12.0	48.1	29.7	7.0	445.3
At 31 December 2018	354.0	9.0	51.1	32.6	8.2	454.9
At 1 January 2018	320.2	7.9	27.0	23.5	7.7	386.3

Intangible asset amortisation is recorded in operating costs within the income statement on page 110.

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

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

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

	2019			2018		
	Standalone CGUs £m	Allocated Goodwill £m	Total £m	Standalone CGUs £m	Allocated Goodwill £m	Total £m
Personal Care	–	151.4	151.4	–	151.8	151.8
Life Sciences	93.5	69.5	163.0	99.2	69.7	168.9
Performance Technologies	23.4	4.5	27.9	23.2	4.5	27.7
Industrial Chemicals	6.2	–	6.2	5.6	–	5.6
	123.1	225.4	348.5	128.0	226.0	354.0

Allocated goodwill primarily relates to £192m (2018: £192m) associated with the 2006 acquisition of Uniqema (with all other balances individually less than £10m). Due to the geographical and operational scale of the Uniqema acquisition, this goodwill balance is tested for impairment at an operating segment level. Standalone CGUs operate independently of the Group's core regional operating assets, are capable of generating largely independent cash inflows and are therefore annually tested separately for impairment.

For impairment testing performed at an operating segment level, cash flow projections are based on the Group's current year results and a growth rate of 3% (an appropriate view based on past experience), discounted using a weighted average cost of capital, which for these purposes has been calculated to be approximately 8.3% pre-tax (2018: 6.7%). 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 2019.

Standalone CGUs

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

	2019 £m	2018 £m
Incotec	68.6	72.6
Biosector	24.9	26.6
Sipo	20.7	21.8
Ionphase	6.6	7.0
Rewitec	2.3	–
	123.1	128.0

For impairment testing performed at a Standalone CGU level, cash flow projections have been based on specific estimates for five years, with the exception of Sipo and Ionphase which use 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 2019	Terminal value growth rate 2018	Pre-tax discount rate 2019	Pre-tax discount rate 2018
Incotec	3.0%	3.0%	8.4%	6.9%
Biosector	3.0%	n/a	10.2%	n/a
Sipo	4.0%	4.0%	10.8%	8.8%
Ionphase	3.0%	3.0%	10.0%	6.4%

Based on the annual impairment testing performed, no impairment has been recognised for the year ended 31 December 2019, and all Standalone CGUs remain on track to perform to our long term expectations, including recently acquired Biosector which was in the early stages of its integration into the Group during 2019 but is forecast to perform in line with the Group's expectations over the long term. 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 Sipo.

For the Sipo CGU, the assumptions underpinning the cash flow projections used in the value in use calculation reflect an appropriate view of past experience, specifically that gross and operating margins will be broadly consistent, adjusted for the commissioning of a new plant (which was substantially complete by the year end) to improve future profitability. The estimated recoverable amount of the CGU exceeded its carrying value by approximately £22m and therefore the Directors concluded that no impairment was required; however the calculations are sensitive to changes in key assumptions. The key assumptions considered by the Directors, where a reasonably possible change could give rise to an impairment, were the terminal value growth rate and discount rate. If the pre-tax discount rate assumption was increased by 2% the CGU's recoverable amount would be reduced to a level comparable with its carrying value. If this higher discount rate assumption was combined with a 1% decrease in the terminal value growth rate, which, although not management's current expectation is considered to be reasonably possible, this would lead to an impairment charge of £2m.

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

13. Property, plant and equipment

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2018	186.6	919.1	1,105.7
Exchange differences	6.6	38.0	44.6
Additions	5.5	98.0	103.5
Acquisitions	7.7	7.7	15.4
Other disposals and write-offs	–	(2.4)	(2.4)
Reclassifications to intangible assets	(0.8)	0.5	(0.3)
At 31 December 2018	**205.6**	**1,060.9**	**1,266.5**
At 1 January 2019	205.6	1,060.9	1,266.5
Exchange differences	(9.2)	(43.5)	(52.7)
Additions	7.3	97.9	105.2
Other disposals and write-offs	(0.3)	(4.7)	(5.0)
Reclassifications to right of use assets	(4.8)	(2.8)	(7.6)
At 31 December 2019	**198.6**	**1,107.8**	**1,306.4**
Accumulated depreciation and impairment losses			
At 1 January 2018	67.1	354.6	421.7
Exchange differences	2.5	15.9	18.4
Charge for the year (note 3)	6.0	42.1	48.1
Other disposals and write-offs	–	(2.0)	(2.0)
At 31 December 2018	**75.6**	**410.6**	**486.2**
At 1 January 2019	75.6	410.6	486.2
Exchange differences	(4.3)	(20.9)	(25.2)
Charge for the year (note 3)	6.4	40.4	46.8
Other disposals and write-offs	0.1	(4.5)	(4.4)
Reclassifications to right of use assets	(1.9)	(1.0)	(2.9)
Impairments	0.1	0.6	0.7
At 31 December 2019	**76.0**	**425.2**	**501.2**
Net book amount			
At 31 December 2019	**122.6**	**682.6**	**805.2**
At 31 December 2018	130.0	650.3	780.3
At 1 January 2018	119.5	564.5	684.0

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

	2019 £m	2018 £m
Assets under construction		
Land and buildings	6.9	9.1
Plant and equipment	294.7	309.0
	301.6	318.1

14. Leases

On initial application of IFRS 16 'Leases', the Group recorded right of use assets and lease liabilities with a value of £46.0m. This exceeded the £35.6m non-cancellable lease commitments reported as at 31 December 2018 under IAS 17 due to extension options reasonably certain to be exercised, partly offset by the application of short-term and low value exemptions. The weighted average incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 2%. Information about leases for which the Group is a lessee is presented below.

Right of use assets

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2019 (on transition)	43.3	2.7	46.0
Exchange differences	(1.7)	(0.2)	(1.9)
Additions	6.1	5.5	11.6
Remeasurements	(5.1)	(0.3)	(5.4)
Other disposals and write-offs	(0.1)	(0.1)	(0.2)
Reclassifications	5.9	1.7	7.6
At 31 December 2019	**48.4**	**9.3**	**57.7**
Accumulated depreciation and impairment losses			
At 1 January 2019 (on transition)	–	–	–
Exchange differences	(0.3)	–	(0.3)
Charge for the year (note 3)	7.3	1.5	8.8
Reclassifications	2.0	0.9	2.9
Impairments	0.1	–	0.1
At 31 December 2019	**9.1**	**2.4**	**11.5**
Net book amount			
At 31 December 2019	**39.3**	**6.9**	**46.2**
At 1 January 2019 (on transition)	43.3	2.7	46.0

Lease liabilities

	2019 £m	2018 £m
Lease liabilities included in the Group balance sheet		
Current	7.8	0.4
Non-current	35.7	0.6
	43.5	1.0

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 2019 the Group has committed to new lease contracts, commencing in 2020, with a total discounted value of £43.9m.

Amounts recognised in the Group income statement

	2019 £m	2018 £m
Interest on lease liabilities	1.0	–
Expenses relating to short-term leases	0.8	–
Expenses relating to low value leases, excluding short-term leases of low value assets	0.1	–
Expenses relating to variable lease components	0.6	–
Depreciation of right of use assets	8.8	–
Impairment of right of use assets	0.1	–
(Profit)/Loss on disposal of right of use assets	(0.4)	–
Hire of plant and machinery and other operating lease rentals under IAS 17	–	10.0
	11.0	10.0

Total cash outflow for leases

	2019 £m	2018 £m
Payment of lease liabilities	8.8	0.5
Payment of short-term, low value and variable lease components	1.5	–
	10.3	0.5

Notes to the Group Accounts continued

15. Future commitments

	2019 £m	2018 £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	32.4	28.4
Intangible assets	0.6	0.2
Authorised, but not contracted for		
Property, plant and equipment	98.6	84.5
Intangible assets	3.8	0.7
	135.4	113.8

16. Investments

The amounts recognised in the balance sheet are as follows:

	2019 £m	2018 £m
Associate	2.8	2.3
Other investments	1.9	2.5
	4.7	4.8

On 14 October 2019, the Group increased its minority shareholding in Cutitronics Limited from 38.6% to 48.0% for consideration of £1.3m. This additional investment will enable Cutitronics to continue testing and enhancing its innovative and customisable CutiTron™ device prior to commercial launch. This investment continues to be recognised as an associate on the Group balance sheet.

Other investments of £1.9m (2018: £2.5m) decreased during the year following a review of their carrying value which resulted in an impairment charge of £0.6m. All remaining assets recognised as other investments on the Group balance sheet are non-quoted equity securities measured at fair value.

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

The amounts recognised in the income statement are as follows:

	2019 £m	2018 £m
Share of loss of associate	0.8	0.2
Impairment of other investments	0.6	–
	1.4	0.2

17. Inventories

	2019 £m	2018 £m
Raw materials	56.7	56.5
Work in progress	43.3	49.0
Finished goods	168.9	181.7
	268.9	287.2

The Group consumed £746.5m (2018: £747.5m) of inventories during the year.

18. Trade and other receivables

	2019 £m	2018 £m
Amounts falling due within one year		
Trade receivables	178.1	197.8
Less: provision for impairment of receivables	(2.2)	(3.0)
Trade receivables – net	175.9	194.8
Other receivables	31.9	29.4
Prepayments	9.0	9.4
	216.8	233.6

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

	2019 £m	2018 £m
Not impaired		
Less than three months	24.3	30.6
Three to six months	1.0	1.8
Over six months	1.0	0.3
	26.3	32.7

The provision for impairment of receivables principally relates to customers in unexpectedly difficult economic circumstances. The overdue receivables against which no provision has been made relate to a number of customers for whom there is no recent history of default, nor any other indication that settlement will not be forthcoming. The other classes within trade and other receivables do not contain impaired assets and are considered to be fully recoverable.

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

	2019 £m	2018 £m
Sterling	15.7	20.1
US Dollar	63.0	68.5
Euro	65.0	71.1
Other	73.1	73.9
	216.8	233.6

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

	2019 £m	2018 £m
At 1 January	3.0	4.8
Exchange differences	(0.1)	0.1
Charged/(released) to income statement	0.2	(1.7)
Net write-off of uncollectible receivables	(0.9)	(0.2)
At 31 December	2.2	3.0

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

Notes to the Group Accounts continued

19. Trade and other payables

	2019 £m	2018 £m
Trade payables	63.8	68.2
Taxation and social security	8.0	7.9
Other payables	29.3	41.7
Accruals and deferred income	62.8	72.7
	163.9	190.5

All trade payables are payable within one year.

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 34 to 37.

	2019 £m	2018 £m
Current assets		
Investments	4.7	4.8
Trade and other receivables (excluding prepayments)	207.8	224.2
	212.5	229.0
Current liabilities		
Trade and other payables (excluding taxation, social security, accruals and deferred income)	93.1	109.9
US$100m 5.94% fixed rate 10 year bond	76.4	–
Unsecured bank loans and overdrafts due within one year or on demand	21.3	35.6
Other loans	11.8	13.2
Lease liabilities	7.8	0.4
	210.4	159.1
Non-current liabilities		
2014 Club facility due 2021	–	131.7
2016 Club facility due 2021	–	20.0
2019 Club facility due 2024	136.2	–
US$100m 5.94% fixed rate 10 year bond	–	78.8
€30m 1.08% fixed rate 7 year bond	25.6	27.1
€70m 1.43% fixed rate 10 year bond	59.7	63.1
£30m 2.54% fixed rate 7 year bond	30.0	30.0
£70m 2.80% fixed rate 10 year bond	70.0	70.0
€50m 1.18% fixed rate 8 year bond	42.6	–
£65m 2.46% fixed rate 8 year bond	65.0	–
US$60m 3.70% fixed rate 10 year bond	45.8	–
Other secured bank loans	0.1	0.3
Other unsecured bank loans	1.6	25.9
Lease liabilities	35.7	0.6
	512.3	447.5

During October 2019, the Group's existing 2014 and 2016 Club facilities were cancelled and replaced with a single new Club facility with an initial maturity date of 2024. 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. The margin the Group pays on its borrowings over and above standard rates is determined by the Group's net debt to EBITDA ratio.

	2019 £m	2018 £m
Maturity profile of financial liabilities		
Repayments fall due as follows:		
Within one year		
Bank loans and overdrafts	97.7	35.6
Other loans	11.8	13.2
	109.5	48.8
Lease liabilities	7.8	0.4
	117.3	49.2
After more than one year		
Loans repayable		
Within one to two years	0.2	78.8
Within two to five years	193.0	235.0
Five years and over	283.4	133.1
	476.6	446.9
Lease liabilities	35.7	0.6
	512.3	447.5
The minimum lease payments under lease liabilities fall due as follows:		
Within one year	8.4	0.4
Within one to two years	6.4	0.3
Within two to five years	10.5	0.4
Five years and over	26.0	–
	51.3	1.1
Future finance charges on lease liabilities	(7.8)	(0.1)
Present value of lease liabilities	43.5	1.0

	2019 £m	2018 £m
Undiscounted maturity analysis of financial liabilities		
Within one year		
Bank loans and overdrafts	98.5	36.5
Other loans	12.4	13.8
Lease liabilities	8.4	0.4
	119.3	50.7
After more than one year		
Loans repayable		
Within one to two years	10.5	92.3
Within two to five years	225.1	254.0
Five years and over	308.5	143.3
Lease liabilities		
Within one to two years	6.4	0.3
Within two to five years	10.5	0.4
Five years and over	26.0	–
	587.0	490.3

The analysis above includes estimated interest payable to maturity on the underlying loans. For the loans due after more than one year £10.3m (2018: £13.1m) of the interest falls due within one year of the balance sheet date, £10.3m (2018: £8.8m) within one to two years, £28.5m (2018: £13.3m) within two to five years and £18.4m (2018: £7.3m) 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	278.0	165.0	113.0	2.62	6.3
US Dollar	175.9	122.2	53.7	5.10	3.6
Euro	131.2	127.9	3.3	1.28	6.2
Other	44.5	–	44.5	–	–
At 31 December 2019	**629.6**	**415.1**	**214.5**	**2.94**	**5.5**
Sterling	163.3	100.0	63.3	2.72	6.6
US Dollar	203.5	78.8	124.7	5.94	1.1
Euro	106.5	90.2	16.3	1.32	6.6
Other	23.4	–	23.4	–	–
At 31 December 2018	496.7	269.0	227.7	3.19	5.0

Fair values

Prior to 2016, the Group did not typically utilise complex financial instruments and accordingly the only element of Group borrowings where fair value differed from book value was the US$100m fixed rate ten year bond that was issued in 2010. On 27 June 2016, the Group issued £100m and €100m of fixed rate bonds. On 6 June 2019, the Group issued a further £65m, €50m and US$60m of fixed rate bonds.

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 2019 £m	**Fair value 2019 £m**	Book value 2018 £m	Fair value 2018 £m
Cash deposits	81.9	81.9	71.2	71.2
Other investments	4.7	4.7	4.8	4.8
2014 Club facility due 2021	–	–	(131.7)	(131.7)
2016 Club facility due 2021	–	–	(20.0)	(20.0)
2019 Club facility due 2024	(136.2)	(136.2)	–	–
US$100m 5.94% fixed rate 10 year bond	(76.4)	(76.5)	(78.8)	(76.5)
€30m 1.08% fixed rate 7 year bond	(25.6)	(26.2)	(27.1)	(27.7)
€70m 1.43% fixed rate 10 year bond	(59.7)	(63.1)	(63.1)	(65.3)
£30m 2.54% fixed rate 7 year bond	(30.0)	(30.6)	(30.0)	(30.4)
£70m 2.80% fixed rate 10 year bond	(70.0)	(73.2)	(70.0)	(71.4)
€50m 1.18% fixed rate 8 year bond	(42.6)	(44.4)	–	–
£65m 2.46% fixed rate 8 year bond	(65.0)	(66.4)	–	–
US$60m 3.70% fixed rate 10 year bond	(45.8)	(47.7)	–	–
Other bank borrowings	(23.0)	(23.0)	(61.8)	(61.8)
Other loans	(11.8)	(11.8)	(13.2)	(13.2)
Lease liabilities	(43.5)	(43.5)	(1.0)	(1.0)

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 other investments and lease liabilities, which are classed as level 3.

Borrowing facilities

As at 31 December 2019, the Group had undrawn committed facilities of £463.8m (2018: £358.4m). In addition, the Group had other undrawn facilities of £65.1m (2018: £38.7m) available. Of the Group's total committed facilities of £1,058.6m, £982.2m expire after 2020. New and repaid borrowings disclosed in the Group Statement of Cash Flows reflect routine short-term cash management, comprising regular monthly drawdowns and repayments on the Group's revolving credit facilities.

Financial risk factors

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

Currency risk

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

For 2019, had the Group's basket of reporting currencies been 10% weaker/stronger than the actual rates experienced, post-tax profit for the year would have been £18.2m (2018: £17.6m) 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 £69.9m (2018: £68.5m) lower/higher.

Interest rate risk

The Group has both interest bearing assets and liabilities. In 2016, the Group had a policy of maintaining no more than 60% of its gross borrowings at fixed interest rates in normal circumstances. During 2016, the Group increased its amount of fixed rate debt following payment of the £136m special dividend and consequent increase in core debt requirements. Bonds were issued in the amounts of £100m and €100m with an average maturity of 5.6 years and interest rate of 2.08%. The Group also retained its US$100m loan note repayable in 2020 carrying a fixed rate of 5.94%. 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. Bonds were issued in the amounts of £65m, €50m and US$60m with an average maturity of 8.1 years and interest rate of 2.47%. At 31 December 2019, approximately 68% of Group borrowings were at fixed rates.

At 31 December 2019, aside from the loan notes and bonds referred to above, all Group debt and cash was exposed to repricing within 12 months of the balance sheet date.

At 31 December 2019, the Group's fixed rate debt was at a weighted average rate of 2.94% (2018: 3.19%). 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 £0.2m (2018: £0.2m) due to a change in interest expense on the Group's floating rate borrowings.

Liquidity risk

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

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

Credit risk

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

Notes to the Group Accounts continued

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

Capital risk management

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

In order to maintain this optimal structure, the Group may adjust the amount of dividends paid, issue new shares, return capital to shareholders or dispose of assets to reduce net debt. Given the Group's strong balance sheet and sustained trading growth, the Group announced a dividend policy in 2011 of paying a dividend of between 40% and 50% of sustainable earnings. Further details can be found in the Finance Review on pages 34 to 37.

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 17.0% against a post-tax Weighted Average Cost of Capital (WACC) of 6.2%, thus hitting the Group's target of maintaining ROIC at a higher level than the 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 2019. Further details can be found in the Finance Review on pages 34 to 37. 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 32 and 33.

21. Provisions

	Environmental £m	Restructuring £m	Other £m	Total £m
At 1 January 2019	9.9	0.6	0.6	11.1
Exchange differences	(0.2)	–	(0.1)	(0.3)
Released to the income statement	(1.0)	–	–	(1.0)
Charged to the income statement	0.5	10.5	0.5	11.5
Cash paid against provisions and utilised	(1.1)	(3.4)	(0.6)	(5.1)
At 31 December 2019	8.1	7.7	0.4	16.2

Analysis of total provisions

	2019 £m	2018 £m
Current	10.9	4.0
Non-current	5.3	7.1
	16.2	11.1

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

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

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

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

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

22. Ordinary share capital

Ordinary shares of 10.61p (2018: 10.36p)	2019 £m	2018 £m
Allotted, called up and fully paid at 1 January and 31 December **131,906,881 ordinary shares of 10.61p each (2018: 135,124,108 ordinary shares of 10.36p each)**	14.0	14.0

At the Annual General Meeting on 24 April 2019, shareholders approved a share consolidation which was completed on 29 April 2019. As a result, shareholders held 41 new Ordinary Shares of 10.609756 pence each in exchange for every 42 Ordinary Shares of 10.357143 pence each held immediately prior to the share consolidation, which were cancelled by the Company.

During 2019 options were granted to employees under the Croda International Plc Sharesave Scheme to subscribe for 94,433 ordinary shares at an option price of 3898p per share and under the Croda International Plc International Sharesave Plan to subscribe for 299,797 ordinary shares at an option price of 3898p per share. Conditional awards over 150,597 ordinary shares were granted under the Performance Share Plan during the year. Also granted in the year were 8,538 shares under the Deferred Bonus Share Plan and 6,134 shares under the Restricted Share Plan.

During the year consideration of £2.7m was received on the exercise of options over 104,269 shares. The options were satisfied with shares transferred from the Group's employee share trusts. Since the year end a further 2,482 shares have been transferred from the trusts.

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

	Year option granted	Number of shares	Price	Options exercisable from
Croda International Plc Sharesave Scheme	2016	6,067	2639p	1 Nov 2019 to 30 Apr 2020
	2017	75,938	3092p	1 Nov 2020 to 30 Apr 2021
	2018	66,154	4144p	1 Nov 2021 to 30 Apr 2022
	2019	93,753	3898p	1 Nov 2022 to 30 Apr 2023
Croda International Plc International Sharesave Plan (2009)	2017	236,267	3092p	1 Nov 2020 to 30 Nov 2020
	2018	200,361	4144p	1 Nov 2021 to 30 Nov 2021
	2019	290,313	3898p	1 Nov 2022 to 30 Nov 2022
Croda International Plc Performance Share Plan (2014)	2017	214,961	Nil	9 Mar 2020
	2018	151,952	Nil	13 Mar 2021
	2019	147,043	Nil	12 Mar 2022
Croda International Plc Deferred Bonus Share Plan	2017	99,883	Nil	9 Mar 2020
	2018	19,022	Nil	13 Mar 2021
	2019	8,683	Nil	12 Mar 2022
Croda International Plc Deferred Bonus Discretionary Arrangement	2018	642	Nil	13 Mar 2021
Croda International Plc Restricted Share Plan	2018	6,751	Nil	20 Mar 2021
	2019	5,060	Nil	26 Mar 2022
	2019	582	Nil	9 Aug 2022

23. Share-based payments

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

	2019 £m	2018 £m
Analysis of amounts recognised in the income statement:		
Charged in respect of equity settled share-based payment transactions	0.1	6.5
Charged in respect of cash settled share-based payment transactions	5.0	8.6
	5.1	15.1
Analysis of amounts recognised in the balance sheet:		
Liability in respect of cash settled share-based payment transactions	7.6	13.0

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

23. Share-based payments continued

Croda International Plc Sharesave Scheme ('Sharesave')

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

	2019	2018
Grant date	12 Sep 2019	27 Sep 2018
Share price at grant date	4948p	5200p
Exercise price	3898p	4144p
Number of employees	700	634
Shares under option	94,433	71,178
Vesting period	Three years	Three years
Expected volatility	20%	20%
Option life	Six months	Six months
Risk free rate	0.5%	1.0%
Dividend yield	1.8%	1.6%
Possibility of forfeiture	7.5% p.a.	7.5% p.a.
Fair value per option at grant date	1103.4p	1186.2p
Option pricing model	Black Scholes	Black Scholes

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

	2019 Number	2019 Weighted average exercise price	2018 Number	2018 Weighted average exercise price
Outstanding at 1 January	263,111	3174p	266,481	2659p
Granted	94,433	3898p	71,178	4144p
Forfeited	(11,363)	3421p	(7,859)	2785p
Exercised	(104,269)	2627p	(66,689)	2201p
Outstanding at 31 December	241,912	3681p	263,111	3174p
Exercisable at 31 December	6,067	2639p	5,321	2232p
For options exercised in year, weighted average share price at date of exercise		4856p		4754p
Weighted average remaining life at 31 December (years)	2.4		2.2	

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:

	2019	2018
Grant date	12 Sep 2019	27 Sep 2018
Share price at grant date	4948p	5200p
Exercise price	3898p	4144p
Number of employees	2,235	2,082
Shares under option	299,797	225,581
Vesting period	Three years	Three years
Expected volatility	20%	20%
Option life	One month	One month
Risk free rate	0.5%	0.7%
Dividend yield	1.8%	1.8%
Possibility of forfeiture	7.5% p.a.	7.5% p.a.
Fair value per option at 31 December	1239.0p	791.8p
Option pricing model	Black Scholes	Black Scholes

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

	2019 Number	2019 Weighted average exercise price	2018 Number	2018 Weighted average exercise price
Outstanding at 1 January	810,102	3197p	782,416	2723p
Granted	299,797	3898p	225,581	4144p
Forfeited	(67,852)	3396p	(54,328)	2783p
Exercised	(315,106)	2653p	(143,567)	2254p
Outstanding at 31 December	726,941	3704p	810,102	3197p
For options exercised in year, weighted average share price at date of exercise		4841p		4780p
Weighted average remaining life at 31 December (years)	1.9		1.7	

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

The PSP scheme was established in 2014 and replaced the Company's previous Executive long term incentive plans. The PSP provides for awards of free shares (ie either conditional shares or nil-cost options) normally made annually which vest after three years dependent upon an EPS performance related sliding scale (non-market condition), an NPP growth measure (non-market condition) and the Group's total shareholder return (market condition). The PSP is discussed in detail in the Directors' Remuneration Report (pages 71 to 97). Shares (on an after tax basis) are subject to a one year post vesting holding period for awards granted in 2014 and a two year post vesting holding period for awards granted in subsequent years. 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:

	2019 Market condition	2019 Non-market condition	2018 Market condition	2018 Non-market condition
Grant date	12 Mar 2019	12 Mar 2019	13 Mar 2018	13 Mar 2018
Share price at grant date	4874p	4874p	4580p	4580p
Number of employees	63	63	68	68
Shares under conditional award	60,239	90,358	62,936	94,404
Vesting period	Three years	Three years	Three years	Three years
Expected volatility	20%	20%	20%	20%
Dividend yield	1.7%	1.7%	1.8%	1.8%
Possibility of forfeiture	3.45% p.a.	3.45% p.a.	3.45% p.a.	3.45% p.a.
Fair value per option at grant date	2315p	4623p	2794p	4345p
Option pricing model	Closed form valuation	Closed form valuation	Closed form valuation	Closed form valuation

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

	2019 Number	2019 Weighted average exercise price	2018 Number	2018 Weighted average exercise price
Outstanding at 1 January	656,684	–	798,825	–
Granted	150,597	–	157,340	–
Forfeited	(36,553)	–	(26,802)	–
Exercised	(256,772)	–	(272,679)	–
Outstanding at 31 December	513,956	–	656,684	–
For options exercised in year, weighted average share price at date of exercise		5055p		4459p
Weighted average remaining life at 31 December (years)	1.0		1.0	

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

The DBSP scheme was established in 2014. Under the DBSP, one third of any annual bonuses due to certain senior executives are deferred. The size of award is determined by the amount of the total bonus divided by one third and converted into a number of Croda shares using the market value of shares at the time the award is granted. Awards are increased by the number of shares equating to the equivalent value of any dividend paid during the option period. The awards vest on the third anniversary of the date of grant, unless the recipient has been dismissed for cause. There are no performance conditions applied to the award. The DBSP is also discussed in the Directors' Remuneration Report (pages 71 to 97).

Notes to the Group Accounts continued

23. Share-based payments continued

	2019	2018
Grant date	12 Mar 2019	13 Mar 2018
Share price at grant date	4874p	4580p
Number of employees	10	10
Shares under conditional award	8,538	18,392
Vesting period	Three years	Three years

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

	2019 Number	2019 Weighted average exercise price	2018 Number	2018 Weighted average exercise price
Outstanding at 1 January	196,808	–	175,340	–
Granted	8,538	–	18,392	–
Dividend enhancement	2,143	–	3,076	–
Forfeited	–	–	–	–
Exercised	(79,901)	–	–	–
Outstanding at 31 December	127,588	–	196,808	–
For options exercised in year, weighted average share price at date of exercise		5050p		–
Weighted average remaining life at 31 December (years)	0.5		0.9	

Croda International Plc Deferred Bonus Discretionary Share Arrangement

In addition to the awards under the DBSP, nil cost options over 642 shares have been awarded to similarly defer bonus entitlement where the DBSP cannot be used due to employment having ceased before the grant date. These options will be deemed to be exercised automatically on the date falling three years after the date of grant. As of 31 December 2019, the weighted average remaining life was 1.2 years.

Croda International Plc Restricted Share Plan ('RSP')

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

	2019	2019	2018
Grant date	9 Aug 2019	26 Mar 2019	20 Mar 2018
Share price at grant date	4744p	4946p	4590p
Number of employees	2	32	31
Shares under conditional award	582	5,552	7,188
Vesting period	Three years	Three years	Three years
Expected volatility	20%	20%	20%
Dividend yield	1.8%	1.8%	1.8%
Possibility of forfeiture	3.45% p.a.	3.45% p.a.	3.45% p.a.
Fair value per option at grant date	4502p	4694p	4356p
Option pricing model	Closed form valuation	Closed form valuation	Closed form valuation

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

	2019 Number	2019 Weighted average exercise price	2018 Number	2018 Weighted average exercise price
Outstanding at 1 January	6,751	–	–	–
Granted	6,134	–	7,188	–
Forfeited	(492)	–	(437)	–
Exercised	–	–	–	–
Outstanding at 31 December	12,393	–	6,751	–
For options exercised in year, weighted average share price at date of exercise		–		–
Weighted average remaining life at 31 December (years)	1.7		2.2	

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

	2019 £m	2018 £m
The authorised, issued and fully paid preference share capital comprises:		
615,562 5.9% preference shares of £1 (2018: 615,562)	0.6	0.6
498,434 6.6% preference shares of £1 (2018: 498,434)	0.5	0.5
21,900 7.5% preference shares of £1 (2018: 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 2019 the QUEST had a net amount due from the Company of £11.1m (2018: £8.4m) and held 172,952 (2018: 46,358) shares transferred at a nil cost (2018: nil cost) with a market value of £8.9m (2018: £2.2m). As at 31 December 2019 the CIPEBT was financed by a repayable on demand loan to the Company of £12.6m (2018: £5.5m) and held 910 (2018: 43,167) shares transferred at a nil cost (2018: nil cost) with a market value of £0.1m (2018: £2.0m).

As at 31 December 2019 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 2019 and, except for a nominal amount, the right to receive dividends has been waived.

As at 31 December 2019 the total number of treasury shares held was 3,018,203 (2018: 3,481,087) with a market value of £154.5m (2018: £163.1m).

26. Non-controlling interests in equity

	2019 £m	2018 £m
At 1 January	7.5	7.6
Exchange differences	(0.4)	0.1
Income allocated to non-controlling interests	(0.1)	(0.2)
At 31 December	7.0	7.5

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.

Notes to the Group Accounts continued

28. Business combinations

2019 Acquisitions

On 16 July 2019, the Group acquired Rewitec® GmbH, a technology based business specialising in improving the efficiency and longevity of wind turbines and moving machinery through the application of their patented additives. Based in Germany, Rewitec's innovations offer sustainability benefits by extending the lifetime and improving the performance of gearboxes, bearings and engines within wind turbine, automotive and marine industries worldwide. The acquisition will form part of our Energy Technologies business (Performance Technologies sector), leveraging our dedicated global sales network to accelerate Rewitec's growth potential.

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

	Rewitec £m
Consideration (inclusive of contingent consideration)	**6.8**
Fair value of assets and liabilities acquired	
Intangible assets	5.4
Trade and other receivables	0.2
Trade and other payables	(0.1)
Taxation	(1.1)
Total identifiable net assets	**4.4**
Goodwill	**2.4**

Total consideration is inclusive of £2.8m contingent consideration, representing the fair value at the date of acquisition. The additional consideration is payable annually over five years based on the financial performance of the acquisition.

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

Acquisition-related costs of £0.3m have been charged to administration expenses in the consolidated income statement for the year ended 31 December 2019 (2018: £2.7m).

2018 Acquisitions

On 11 January 2018, the Group acquired Nautilus Biosciences Canada Inc, a technology-rich marine biotechnology company based in Charlottetown, Prince Edward Island, Canada for consideration of £5.6m (inclusive of debt). Identifiable net assets of £1.5m were acquired, with the acquisition generating goodwill of £4.1m.

On 28 March 2018, the Group acquired Plant Impact Plc, an innovative crop enhancement business which researches and develops chemical biostimulants to sustainably improve crop yield and quality for consideration of £9.3m (inclusive of debt). Identifiable net assets of £7.4m were acquired, with the acquisition generating goodwill of £1.9m.

On 28 December 2018, the Group acquired Brenntag Biosector A/S, a market leading specialist in the manufacture and supply of adjuvants for the human and veterinary vaccine markets, based in Frederikssund, Denmark. During 2019 a final purchase price adjustment of £0.3m was received reducing the total consideration to £63.5m (inclusive of debt). Identifiable net assets acquired of £37.2m were unchanged, with the acquisition generating revised goodwill of £26.3m (at exchanges rates prevailing on the date of acquisition).

During 2019, the Group completed fair value reviews relating to its 2018 acquisitions. This review did not identify any changes to the asset base or goodwill.

29. Contingent liabilities

The Group is subject to various claims which arise in the course of business. These contingent liabilities are reviewed on a regular basis and where possible an estimate is made of the potential financial impact on the Group.

The Group is also involved in certain environmental legal actions and proceedings. Whilst the Group cannot predict the outcome of any current or future actions or proceedings with any certainty, it currently believes the likelihood of any material liabilities to be low, and that the liabilities, if any, will not have a material adverse effect on its consolidated income, financial position or cash flows. The Group also considers it has insurance in place in relation to any significant contingent liabilities. The environmental actions and proceedings the Group is subject to relate to our operations in the USA and are a matter of public record.

Company Financial Statements

Company Balance Sheet

at 31 December 2019

	Note	2019 £m	2018 £m
Fixed assets			
Intangible assets	D	0.2	–
Tangible assets	E	1.7	1.8
Investments			
Shares in Group undertakings	F	561.1	569.8
Other investments other than loans	G	–	0.6
Retirement benefit assets	L	–	1.2
		563.0	573.4
Current assets			
Debtors (including £1,585.1m (2018: £1,674.5m) due after more than one year)	H	1,632.5	1,702.6
Deferred tax asset	I	0.4	–
Cash and cash equivalents		2.6	0.8
		1,635.5	1,703.4
Current liabilities			
Creditors: Amounts falling due within one year	J	(52.8)	(55.2)
Borrowings	K	(12.6)	(13.3)
		(65.4)	(68.5)
Net current assets		1,570.1	1,634.9
Total assets less current liabilities		2,133.1	2,208.3
Non-current liabilities			
Deferred tax liability	I	–	(0.2)
Borrowings	K	(389.0)	(243.4)
Retirement benefit liabilities	L	(2.0)	–
		(391.0)	(243.6)
Net assets		1,742.1	1,964.7
Capital and reserves			
Ordinary share capital		14.0	14.0
Preference share capital		1.1	1.1
Called up share capital		15.1	15.1
Share premium account		93.3	93.3
Reserves[1]		1,633.7	1,856.3
Total shareholders' funds		1,742.1	1,964.7

1 Included within Reserves is profit after tax of £49.6m (2018: £28.1m)

The financial statements on pages 149 to 155 were approved by the Board on 24 February 2020 and signed on its behalf by

Anita Frew
Chair

Jez Maiden
Group Finance Director

Registered in England number 206132

Company Financial Statements continued

Company Statement of Changes in Equity

for the year ended 31 December 2019

	Note	Share capital £m	Share premium account £m	Capital redemption reserve £m	Revaluation reserve £m	Retained earnings £m	Total £m
At 1 January 2018		15.1	93.3	0.9	2.1	1,928.4	2,039.8
Profit for the year attributable to equity shareholders		–	–	–	–	28.1	28.1
Other comprehensive income		–	–	–	–	0.4	0.4
Transactions with owners:							
Dividends on equity shares	8	–	–	–	–	(110.5)	(110.5)
Share-based payments		–	–	–	–	6.4	6.4
Transactions in own shares		–	–	–	–	0.5	0.5
Total transactions with owners		–	–	–	–	(103.6)	(103.6)
Total equity at 31 December 2018		**15.1**	**93.3**	**0.9**	**2.1**	**1,853.3**	**1,964.7**
At 1 January 2019		15.1	93.3	0.9	2.1	1,853.3	1,964.7
Profit for the year attributable to equity shareholders		–	–	–	–	49.6	49.6
Other comprehensive expense		–	–	–	–	(0.9)	(0.9)
Transactions with owners:							
Dividends on equity shares	8	–	–	–	–	(266.9)	(266.9)
Share-based payments		–	–	–	–	(0.1)	(0.1)
Transactions in own shares		–	–	–	–	(4.3)	(4.3)
Total transactions with owners		–	–	–	–	(271.3)	(271.3)
Total equity at 31 December 2019		**15.1**	**93.3**	**0.9**	**2.1**	**1,630.7**	**1,742.1**

Of the retained earnings, £659.9m (2018: £860.1m) are realised and £970.8m (2018: £993.2m) 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. Accordingly, the Company has adopted FRS 101 'Reduced Disclosure Framework' and has ceased to apply all UK Accounting Standards issued prior to FRS 100. Therefore the recognition and measurement requirements of EU-adopted IFRS have been applied, with amendments where necessary in order to comply with the requirements of the Companies Act 2006 ('the Act'). 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 149 to 155 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 EU-adopted IFRS, 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 115 to 121, except for those relating to the recognition and measurement of goodwill and the recognition of revenue, which are not directly relevant to the Company financial statements.

The Group accounting policy for financial risk factors is also relevant to the preparation of the Company financial statements and is disclosed on pages 141 and 142.

B. Profit and loss account

Of the Group's profit for the year, £49.6m (2018: £28.1m) is included in the profit and loss account of the Company which was approved by the Board on 24 February 2020 but which is not presented as permitted by Section 408 Companies Act 2006.

Included in the Company profit and loss account is a charge of £0.1m (2018: £0.1m) in respect of the Company's audit fee.

C. Employees

	2019 £m	2018 £m
Company employment costs including Directors		
Wages and salaries	6.6	8.0
Share-based payment charges (note M)	0.9	4.3
Social security costs	1.1	1.2
Post-retirement benefit costs	0.6	0.5
	9.2	14.0

	2019 Number	2018 Number
Average employee numbers by function		
Production	18	22
Administration	39	38
	57	60

As required by the Companies Act 2006, the figures disclosed above are weighted averages based on the number of employees at each quarter end and include Executive Directors. At 31 December 2019, the Company had 54 (2018: 62) employees in total.

Detailed information concerning Directors' remuneration, interests and options is shown in the table within the Directors' Remuneration Report which is subject to audit on pages 71 to 97 which forms part of the Annual Report and Accounts.

Notes to the Company Financial Statements continued

D. Intangible assets

	Computer software £m
Cost	
At 1 January 2019	0.8
Additions	0.2
At 31 December 2019	**1.0**
Accumulated amortisation	
At 1 January 2019	0.8
Charge for the year	–
At 31 December 2019	**0.8**
Net carrying amount	
At 31 December 2019	**0.2**
At 31 December 2018	–

E. Tangible assets

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 January 2019	2.3	1.8	4.1
Additions	–	0.1	0.1
Disposals	–	(0.1)	(0.1)
Reclassification	(0.1)	–	(0.1)
At 31 December 2019	**2.2**	**1.8**	**4.0**
Accumulated depreciation			
At 1 January 2019	1.4	0.9	2.3
Charge for the year	0.1	0.1	0.2
Disposals	–	(0.1)	(0.1)
Reclassification	(0.1)	–	(0.1)
At 31 December 2019	**1.4**	**0.9**	**2.3**
Net book amount			
At 31 December 2019	**0.8**	**0.9**	**1.7**
At 31 December 2018	0.9	0.9	1.8

The reclassification above relates to a fully depreciated asset which, following the adoption of IFRS 16 in January 2019, has been reclassified as a right of use asset. Analysis of right of use assets and liabilities have been excluded from these accounts due to immateriality.

F. Shares in Group undertakings

	Shares £m	Loans £m	Total £m
Cost			
At 1 January 2019	344.4	254.5	598.9
Exchange differences	–	(5.5)	(5.5)
Additions	0.4	111.1	111.5
Amounts repaid	(4.9)	(109.6)	(114.5)
At 31 December 2019	**339.9**	**250.5**	**590.4**
Impairment			
At 1 January 2019	(27.8)	(1.3)	(29.1)
Impairment in the year	–	(0.2)	(0.2)
At 31 December 2019	**(27.8)**	**(1.5)**	**(29.3)**
Net book value			
At 31 December 2019	**312.1**	**249.0**	**561.1**
At 31 December 2018	316.6	253.2	569.8

The undertakings which affect the financial statements are listed on pages 156 to 158.

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

G. Other investments other than loans

	2019 £m	2018 £m
At 1 January	**0.6**	0.6
Impairment	**(0.6)**	–
At 31 December	**–**	0.6

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

H. Debtors

	2019 £m	2018 £m
Amounts owed by Group undertakings	**1,589.6**	1,675.4
Corporation tax	**42.1**	26.5
Other receivables	**0.5**	0.4
Prepayments	**0.3**	0.3
	1,632.5	1,702.6

Although the amounts owed by Group undertakings have no fixed date of repayment, £1,585.1m (2018: £1,674.5m) is expected to be collected after one year. Of the amount at 31 December 2019, £1,584.5m will continue to attract interest from 1 January 2020 at a floating rate based on the main facility agreement. The remainder will continue to be interest free.

I. Deferred tax

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

	2019 £m	2018 £m
Retirement benefit obligations	**0.4**	(0.2)
The movement on deferred tax balances during the year is summarised as follows:		
At 1 January	**(0.2)**	(0.2)
Deferred tax credited to other comprehensive income	**0.6**	–
At 31 December	**0.4**	(0.2)

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

J. Creditors: Amounts falling due within one year

	2019 £m	2018 £m
Amounts falling due within one year		
Trade payables	**–**	0.4
Taxation and social security	**1.5**	1.3
Amounts owed to Group undertakings	**46.8**	46.7
Other payables	**3.4**	5.8
Accruals and deferred income	**1.1**	1.0
	52.8	55.2

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

Notes to the Company Financial Statements continued

K. Borrowings

The Company's objectives, policies and strategies in respect of financial instruments are outlined in the accounting policies note on page 120 which forms part of the Annual Report and Accounts. Short term receivables and payables have been excluded from all of the following disclosures.

	2019 £m	2018 £m
Maturity profile of financial liabilities		
2014 Club facility due 2021	–	33.3
2016 Club facility due 2021	–	19.9
2019 Club facility due 2024	96.1	–
€30m 1.08% fixed rate 7 year bond	25.6	27.1
€70m 1.43% fixed rate 10 year bond	59.7	63.1
£30m 2.54% fixed rate 7 year bond	30.0	30.0
£70m 2.80% fixed rate 10 year bond	70.0	70.0
€50m 1.18% fixed rate 8 year bond	42.6	–
£65m 2.46% fixed rate 8 year bond	65.0	–
Bank loans and overdrafts repayable on demand	12.6	13.3
	401.6	256.7
Repayments fall due as follows:		
Within one year		
Bank loans and overdrafts	12.6	13.3
	12.6	13.3
After more than one year		
Loans repayable		
Within one to five years	151.7	110.3
After five years	237.3	133.1
	389.0	243.4

L. Post-retirement benefits

In line with the requirements of FRS 101, the Company recognises its share of the UK pension scheme assets and liabilities. A full reconciliation of the Group retirement benefit obligation can be found in note 11 of the Group financial statements on pages 128 to 131. The table below shows the movement in the obligation during the year.

	2019 £m	2018 £m
Opening balance:		
Assets	48.7	48.6
Liabilities	(47.5)	(47.7)
Net opening retirement benefit asset	1.2	0.9
Movements in the year:		
Service cost – current	(0.6)	(0.5)
Service cost – past	0.1	(0.2)
Interest cost	0.1	–
Contributions	0.5	0.6
Remeasurements	(3.3)	0.4
Closing balance	(2.0)	1.2

M. Share-based payments

The total charge for the year in respect of share-based remuneration schemes was £0.9m (2018: £4.3m). The grant by the Company of options over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity.

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

N. Contingent liabilities

The Company has guaranteed loan capital and bank overdrafts of subsidiary undertakings amounting to £162.3m (2018: £104.3m).

O. Dividends

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

P. Related party transactions

The Company has taken advantage of the exemption available under FRS 101 from disclosing transactions with other Group undertakings. There were no other related party transactions during the year. Information on the Group can be found in note 27 on page 147 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 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)
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 Thorntons Law LLP, Citypoint, 3rd Floor, 65 Haymarket Terrace, Edinburgh, EH12 5HD
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)

2nd Floor, No. 21, Eastern of Yonyou Industrial Park, No. 9 Yongfeng Road, Haidian District, Beijing
Incotec (Beijing) Agricultural Technology Co. Ltd (vii)

No. 2 Plant, No. 1 QuanFeng Road, Wuqing Development Zone, Wuqing District, Tianjin
Incotec (Tianjin) 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)

Room 3010, Guangzhou International Trade Center, No. 1, LinHe Road West, Guangzhou
IonPhasE (Guangzhou) Special Polymers Co., Ltd (vii)

Incorporated in France

1, rue de Lapugnoy, 62920 Chocques
Croda Chocques SAS (vii)

Route Nationale 10, Immoparc, 78190 Trappes
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)
Unicorn Power BV (viii)

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

300-A Columbus Circle, Edison, NJ 08837
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 – Av. Alicia Moreau de Justo 2030 Piso 1, Oficina 117, Buenos Aires
Croda Argentina SA (vii)

Australia – Suite 2, Level 6, 111 Phillip Street, Parramatta, NSW 2150
Croda Australia (ii) (vii)

Australia – 7 Gateway Drive, Carrum Downs, Victoria 3201
Kriset Pty. Ltd (vii)

Belgium – "Corporate Village", Da Vincilaan 9/E6 Elsionor, 1930 Zaventem
Croda Belgium BVBA (vii)

Brazil – Rua Croda, 580, Distrito Industrial, Campinas, São Paulo, CEP 13.074-710
Croda do Brasil Ltda (vii)

Canada – 1700 Langstaff Road, Suite 1000, Vaughan, Ontario, L4K 3S3
Croda Canada Ltd (vii)

Chile – Santa Beatriz 100, 12th Floor, Office 1205, Providencia Santiago
Croda Chile Ltda (vi) (vii)

Colombia – Calle 90 # 19-41 Office 601, Bogotá
Croda Colombia (ii) (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, Thane-400710, Maharashtra
Croda India Company Private Ltd (i) (v) (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)

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)

Japan – 4-3 Hitotsubashi 2-chome, Chiyoda-ku, Tokyo 101-0003
Croda Japan KK (i) (vii)

Malaysia – Unit no. 203, 2nd floor, block C, Damansara Intan no. 1, Jalan SS20/27, Petaling Jaya, Selangor
Incotec Malaysia Sdn. Bhd (vii)

Mexico – Hamburgo 213, Piso 10, Colonia Juárez, Delegacion Cuauhtémoc, D.F., C.P. 06600
Croda México 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)

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)

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)

Related Undertakings continued

Incorporated in other overseas countries continued

Spain – Plaza. Francesc Macià, 7, 7ºB, 08029 Barcelona
Croda Ibérica 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)

Taiwan – 5th, No 134 Chung Shan Road, Chung Li District, Taoyuan City, Taiwan 32041
Croda Hong Kong Company Ltd – Taiwan Representative office (ii) (vii)

Thailand – 319 Chamchuri Square Building, 16th Floor, Unit 13-14, Payathai Road, Patumwan, Bangkok 10330
Croda (Thailand) Co., Ltd (i) (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 2112, 2113, 21st Floor, Jafza One, Jebel Ali Free Zone, Dubai
Croda Middle East FZE (vii)

Zimbabwe – 4a Knightsbridge Crescent, Highlands, Harare
Croda Chemicals Zimbabwe Pvt Ltd (viii)
Croda Zimbabwe (Pvt) Ltd (viii)

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
(viii). Dormant
(ix). Holding company
(x). Property holding company
(xi). Trustee
(xii). Captive insurance company
(xiii). Research enterprise

Non-wholly owned subsidiaries and associates:

Incorporated in the UK

Torus Building, Rankine Avenue, East Kilbride, Scotland, G75 0QF	
Cutitronics Ltd	48.00%
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%
Malaysia – Unit no. 203, 2nd floor, block C, Damansara Intan no. 1, Jalan SS20/27, Petaling Jaya, Selangor	
Incotec Kedah (M) Sdn. Bhd (vii)	51.00%
Sweden – Scheelevägen 22, 22363 Lund	
Enza Biotech AB (xiii)	88.00%

Shareholder Information

2020 Annual General Meeting	23 April 2020
2019 Final ordinary dividend payment	28 May 2020
2020 Half year results announcement	23 July 2020
2020 Interim ordinary dividend payment	1 October 2020
2020 Preference dividend payments	30 June 2020
	31 December 2020
2020 Full year results announcement	23 February 2021

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, elect for the dividend reinvestment plan, 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 2019, or last date traded*, were as follows:

Ordinary shares	5150p
5.9% preference shares	105p*
6.6% preference shares	107p*

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 provided by Link Asset Services, a trading name of Link Market Services Trustees Ltd 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

Share dealing

A simple and competitive service to buy and sell shares is provided by Link Asset Services. There is no need to pre-register and there are no complicated application forms to fill in. Visit www.linksharedeal.com to access a wealth of stock market news and information free of charge. For further information on this service, or to buy and sell shares, visit www.linksharedeal.com or call 0371 664 0445 (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 4.30pm, Monday to Friday, excluding public holidays in England and Wales.

Shareholder Information continued

Share dealing continued

This is not a recommendation to buy or sell shares and this service may not be suitable for all shareholders. The price of shares can go down as well as up, and you are not guaranteed to get back the amount that you originally invested. Terms, conditions and risks apply. Link Asset Services is a trading name of Link Market Services Trustees Limited which is authorised and regulated by the Financial Conduct Authority. The service is only available to private shareholders resident in the European Economic Area, the Channel Islands or the Isle of Man.

Link Asset Services is a trading name of Link Market Services Limited and Link Market Services Trustees Limited. Share registration and associated services are provided by Link Market Services Limited (registered in England and Wales, No. 2605568). Regulated services are provided by Link Market Services Trustees Limited (registered in England and Wales, No. 2729260), which is authorised and regulated by the Financial Conduct Authority.

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 Asset Services, 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.

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

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+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
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Morgan Stanley & Co. International plc

Principal Solicitors

Freshfields Bruckhaus Deringer LLP

Stockbrokers

Morgan Stanley & Co. International plc
HSBC Bank plc

Financial PR Advisers

Teneo

Five Year Record

Earnings

	2019 £m	2018 £m	2017 £m	2016 £m	2015 £m
Turnover	**1,377.7**	1,386.9	1,373.1	1,243.6	1,081.7
Adjusted operating profit[1]	**339.7**	342.5	332.2	298.2	264.2
Adjusted profit before tax[1]	**322.1**	331.5	320.3	288.3	254.7
Profit after tax	**223.8**	238.3	236.7	197.6	181.1
Profit attributable to owners of the parent	**223.9**	238.5	237.0	196.7	180.7
Return on sales[1] (%)	**24.7**	24.7	24.2	24.0	24.4
Effective tax rate[1] (%)	**25.6**	24.6	26.8	28.0	28.0
	pence	pence	pence	pence	pence
Adjusted earnings per share[1]	**185.0**	190.2	179.0	155.8	135.0
Ordinary dividends per share	**90.0**	87.0	81.0	74.0	69.0
	times	times	times	times	times
Net debt/EBITDA[1]	**1.4**	1.1	1.0	1.1	0.9
EBITDA interest cover[1 2]	**24.4**	28.7	28.7	33.1	43.2

Summarised Balance Sheet

	2019 £m	2018 £m	2017 £m	2016 £m	2015 £m
Intangible assets, property, plant and equipment and investments	**1,301.4**	1,240.0	1,072.5	954.4	799.4
Inventories	**268.9**	287.2	258.5	235.7	221.6
Trade and other receivables	**216.8**	233.6	202.2	192.4	156.1
Trade and other payables	**(164.7)**	(191.3)	(202.5)	(188.8)	(161.7)
Capital employed	**1,622.4**	1,569.5	1,330.7	1,193.7	1,015.4
Tax, provisions and other	**(131.1)**	(127.5)	(88.8)	(74.3)	(70.0)
Retirement benefit liabilities	**(75.0)**	(18.5)	(30.5)	(146.5)	(78.8)
	1,416.3	1,423.5	1,211.4	972.9	866.6
Shareholders' funds	**861.6**	990.5	822.3	600.6	600.8
Non-controlling interests	**7.0**	7.5	7.6	8.2	6.5
Net assets	**868.6**	998.0	829.9	608.8	607.3
Net debt	**547.7**	425.5	381.5	364.1	259.3
Invested capital	**1,416.3**	1,423.5	1,211.4	972.9	866.6

Return on capital

	2019 £m	2018 £m	2017 £m	2016 £m	2015 £m
Adjusted operating profit net of tax[1]	**252.8**	258.2	243.2	214.7	190.2
Invested capital	**1,416.3**	1,423.5	1,211.4	972.9	866.6
Adjustments for:					
Goodwill previously written off to reserves	**50.2**	50.2	50.2	50.2	50.2
Accumulated amortisation of acquired intangible assets	**22.7**	14.8	8.2	4.2	0.1
Adjusted invested capital	**1,489.2**	1,488.5	1,269.8	1,027.3	916.9
Average adjusted invested capital[3]	**1,488.9**	1,343.6	1,148.6	972.1	818.4
Return on invested capital (ROIC)[4] (%)	**17.0**	19.2	21.2	22.1	23.2
Post-tax cost of capital (%)	**6.2**	5.1	4.8	5.3	5.8
Charge for invested capital	**(92.3)**	(68.5)	(55.1)	(51.5)	(47.5)
Economic value added[1]	**160.5**	189.7	188.1	163.2	142.7

1 Before exceptional items, acquisition costs, 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 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 Revisions to the Group's definition of ROIC, as set out in the Finance Review, have been applied consistently throughout the 2019 Annual Report and Accounts

The five year record is presented based on the applicable accounting standards at the relevant reporting date.

Glossary

Adjusted	Before exceptional items, acquisition costs, amortisation of intangible assets arising on acquisition and the tax thereon where applicable
AGM	Annual General Meeting
AI	Artificial Intelligence
AIM	Alternative Investment Market
ALM	Asset-Liability Matching
ASF	African Swine Fever
Bio-based organic	Carbon containing from renewable and non-fossil sources
CARE	Career Average Revalued Earnings
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
CGU	Cash Generating Unit
CIC	Charge for Invested Capital
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
Core Business	Personal Care, Life Sciences and Performance Technologies
CPI	Consumer Price Index
CPS	Croda Pension Scheme
CSR	Corporate Social Responsibility
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
FCA	Financial Conduct Authority
FRC	Financial Reporting Council
FRS	Financial Reporting Standard
FTSE	Financial Times Stock Exchange
GDPR	General Data Protection Regulation
GRASE	Generally Reconsigned as Safe and Effective
GHG	Greenhouse Gas
GHG emissions – scope 1	Greenhouse Gas emissions from sources that we own or control
GHG emissions – scope 2	Greenhouse Gas emissions that are a consequence of our activities, but occur at sources owned or controlled by another entity
GMP	Good Manufacturing Practice
HMRC	HM Revenue & Customs
HR	Human Resources
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IC	Invested Capital
IFRS	International Financial Reporting Standards
IP	Intellectual Property
ISO	International Organization for Standardization
IT	Information Technology
KPI	Key Performance Indicator
M&A	Mergers & Acquisitions
Market sectors	Personal Care, Life Sciences, Performance Technologies, Industrial Chemicals
Net debt	Borrowings and other financial liabilities less cash and cash equivalents
NGO	Non-governmental Organisation
NOPAT	Net Operating Profit After Tax
NPP	New and Protected Products
NRFT	Not Right First Time
OSHA	Occupational Safety and Health Administration
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
SAP EHS	Environment Health & Saftey module in the SAP reporting system
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	Taskforce on Climate Related Financial Disclosure
Te	Tonnes
$TeCO_2e$	Tonnes Carbon Dioxide Equivalent
TRIR	Total Recordable Injury Rate
TSR	Total Shareholder Return
UK	United Kingdom
Underlying	Current year results in local currency translated to Sterling at the prior year average foreign exchange rate excluding acquisitions
USA	United States of America
UV	Ultra Violet
WACC	Weighted Average Cost of Capital
WHO	World Health Organisation

Cautionary Statement
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