

GRI Sustainability Reporting 2021

This is the 14th consecutive year that we have provided a Global Reporting Initiative (GRI) Report. We are reporting to a self-declared 'Core' accordance level for the reporting period 1 January 2021 to 31 December 2021.

Our 2021 GRI Report is integral to our corporate reporting suite and provides insights into our strategy that will help us meet our ambition to become Climate, Land and People Positive by 2030. Our long-established strategy "**Sustainability + Innovation = Growth**" delivers value for all stakeholders, even in years of challenge and worldwide change.

Our separately published 2021 Sustainability Report contains a significant amount of information relating to GRI content whilst some information can also be found in our 2021 Annual Report and, where applicable, will be indicated in the following content index.







This GRI report provides further details not found in either of these two reports, whilst further information on key topics can be found on the company website www.croda.com. Any supporting information is indicated throughout this report, where relevant.

GRI 102-55 Content Index

The table below lists the Standard Disclosures and Specific Disclosures that we disclose for our GRI Report 'core' in-accordance level.

General Disclosures (2019)

Number	Title	Further Information	UN Alignment	SDG
Universal Standards				
Organisational Profile				
102-1	Name of the organisation	Croda International Plc		
102-2	Activities, brands, products and services	Performance and financials p.22-38 ARA 2019		
102-3	Location of headquarters	Goole, East Yorkshire, United Kingdom		
102-4	Location of operations	https://www.croda.com/en-gb/careers/our-locations		
102-5	Ownership and legal form	Shareholder Information p.159 ARA 2019		
102-6	Markets served	https://www.croda.com/en-gb/careers/discover-croda/markets-we-serve		
102-7	Scale of the organisation	Performance and financials p.22-38 ARA 2019		

102-8	Information on employees and other workers		
102-9	Supply chain		
102-10	Significant changes to the organisation & its supply chain	2018 Acquisitions p.148 ARA 2019	
102-11	Precautionary principle or approach	Risk management p.38-43 ARA 2019	
102-12	External initiatives	Engaging stakeholders p.14-15 ARA 2019	
102-13	Memberships of associations	Engaging stakeholders p.14-15 ARA 2019	
Strategy and Analysis			
102-14	Statement from senior decision-maker	Chair's statement p.10 ARA 2019 Chief Executive's Review p.16 ARA 2019	
102-15	Key impacts, risks and opportunities	Chief Executive's Review p.16 ARA 2019 Risk management p.38-43 ARA 2019	
Ethics and Integrity			
102-16	Values, principles, standards and norms of behaviour	Chair's letter p.44 ARA 2019	

		Delivering sustainability p.16-17 SR 2019	
		Our commitment p18-19 SR 2019	
102-17	Mechanisms for advice and concerns about ethics	https://www.croda.com/en-gb/about-us/what-we-do/policies-and-procedures/whistleblowing-policy	
Governance			
102-18	Governance structure	Governance structure p.59 ARA 2019	
102-19	Delegating authority	Governance structure p.59 ARA 2019 Risk management and internal control p.64 ARA 2019 Other commitments p.70 ARA 2019	
102-20	Executive level responsibility for economic, environmental and social topics	Other commitments p.70 ARA 2019 Delivering sustainability p.16-17 SR 2019	
102-21	Consulting stakeholders on economic, environmental and social topics	Engagement with our stakeholders p. 54-55 ARA 2019	
102-22	Composition of the highest governance body and its committees	Corporate governance p.58-59 ARA 2019	
102-23	Chair of the highest governance body	Corporate governance p.58-59 ARA 2019	

102-24	Nominating and selecting the highest governance body		
102-25	Conflicts of interest	Conflicts of interest p.50 ARA 2019	
102-26	Role of highest governance body in setting purpose, values and strategy	Chair's statement p.10 ARA 2019	
102-27	Collective knowledge of highest governance body	Our leadership team p46-47 ARA 2019	
102-28	Evaluating the highest governance body's performance	Board performance p60 ARA 2019	
102-29	Identifying and managing economic, environmental and social impacts	Risk management p.38-43 ARA 2019	
102-30	Effectiveness of risk management process	How we monitor p.38 ARA 2019	
102-31	Review of economic, environmental and social topics	Risk management p.38-43 ARA 2019	
102-32	Highest governance body's role in sustainability reporting		
102-33	Communicating critical concerns	How we manage risk p.38 ARA 2019	
102-36	Process for determining remuneration	Directors' remuneration report p.71-97 ARA 2019	



102-37	Stakeholders' involvement in remuneration	Directors' remuneration report p.71-97 ARA 2019
Stakeholder Engagement		
102-40	List of stakeholder groups	Our stakeholders p.45-15 ARA 2019
102-41	Collective bargaining agreements	Our stakeholders p.45-15 ARA 2019
102-42	Identifying and selecting stakeholders	Our stakeholders p.45-15 ARA 2019
102-43	Approach to stakeholder engagement	Our stakeholders p.45-15 ARA 2019
102-44	Key topics and concerns raised	Our stakeholders p.45-15 ARA 2019
Identified Material Aspects and Boundaries		
103	Identified Material Areas and Boundaries: Management approach	
102-45	Entities included in the consolidated financial statements	
102-46	Defining report content and topic boundaries	
102-47	List of material topics	
102-48	Restatements of information	
102-49	Changes in reporting	

Report Profile

102-50	Reporting Period	This report covers the performance of the Croda Group for the period 1 January 2019 to 31 December 2019. The reporting of some objectives and targets may cover a wider period; this will be made clear where relevant.
102-51	Date of most recent report	2021
102-52	Reporting cycle	Annually
102-53	Contact point for questions regarding the report	sustainability@croda.com
102-54	Claims of reporting in accordance with GRI standards	This report has been prepared in accordance with the GRI Standards: Core option
102-55	Content Index	
102-56	External assurance	External audit p. 66, 68-69, 100 ARA 2019

Topic Specific Disclosures (2019)

Economic

103	Economic performance management approach
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Aspect: Economic Performance



201-1 Direct economic value generated and distributed Financial statements p.122-123 ARA 2019

201-2 Financial implications and other risks and opportunities due to climate change Risk heat map p.39 ARA 2019

201-3 Defined benefit plan obligations and other retirement plans Summary of pension arrangements p.74 ARA 2019

201-4 Financial assistance received from government

Aspect: Procurement Practices

103 Procurement Practices Management Approach

204-1 Proportion of spending on local suppliers

Aspect: Anti-corruption

205-1 Operations assessed for risks relating to corruption Audit, risk and internal control p. 64 ARA 2019

205-2 Communication and training about anti-corruption policies and procedures

Aspect: Anti-competitive behaviour

206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes

Aspect: Tax

207-1 Approach to tax Group accounting policies p.118-119 ARA 2019

207-2 Tax governance, control, and risk management Group accounting policies p.118-119 ARA 2019

207-3 Stakeholder engagement and management of concerns related to tax Group accounting policies p.118-119 ARA 2019

Environment (See climate action)

103-1 Explanation of the material topic and its boundary

103-2 The management approach and its components










103-3 Evaluation of the management approach and measurement
























Aspect: Materials

301-1 Materials used by weight or volume Climate p.20-25 SR 2019



Aspect: Energy

302-1	Energy consumption within the organisation	Reducing emissions p.22 SR 2019 2019 Performance p.40 SR 2019	   
302-3	Energy intensity	Climate p.2 SR 2019 2019 Performance p.40 SR 2019	   
302-4	Reduction of energy consumption	Reducing emissions p.22 SR 2019 2019 Performance p.40 SR 2019	   
Aspect: Water			
303-3	Water withdrawal	Fundamentals p.32 SR 2019 Environmental stewardship p.35 SR 2019 2019 Performance p.40 SR 2019	  
303-5	Water consumption	Being land positive p.5 SR 2019 Land positive p.25 SR 2019 Land use p.26 SR2019 Fundamentals p.32 SR 2019	  
Aspect: Biodiversity			

304-1	Operational sites owned, leased, managed in or adjacent to protected sites		
304-2	Significant impacts of activities, products and services on biodiversity	Land positive p.25 SR 2019 Land use p.26 SR 2019	
Aspect: Emissions			
305-1	Direct (Scope 1) GHG emissions	Climate positive p.20-22 SR 2019 2019 Performance p.40 SR 2019	    
305-2	Energy indirect (Scope 2) GHG emissions	Reducing emissions p.22 SR 2019 2019 Performance p.40 SR 2019	    
305-3	Other indirect (Scope 3) GHG emissions	Scope 3 emissions p.23 SR 2019	    
305-4	GHG emissions intensity	Climate positive p.20 SR 2019 Reducing emissions p.22 SR 2019	  
305-5	Reduction of GHG emissions	Climate positive p.20 SR 2019 Carbon cover p.21 SR 2019	  

Reducing emissions p.22-23 SR 2019

305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions Environmental stewardship p.40 SR 2019



Aspect: Effluents and Waste

306-1 Water discharge by quality and destination



306-2 Waste by type and disposal method



306-3 Significant spills



Aspect: Compliance

307-1 Non-compliance with environmental laws and regulations



Aspect: Supplier Environmental Assessment

308-1 New suppliers that were screened using environmental criteria Being climate positive p.3 SR 2019
Stakeholders p.14-15 SR 2019



Scope 3 emissions p.23 SR 2019

Land use p.26 SR 2016

Fundamentals p.33 SR 2019

Labour Practices and Decent Work

Aspect: Employment

103 Management approach

401-1 New employee hires and employee turnover



401-3 Parental leave

Gender pay gap p.88 ARA 2019



Aspect: Occupational Health and Safety

103-1 Explanation of the material topic and its boundary

103-2 The management approach and its components

103-3 Evaluation of the management approach and measurement

403-1 Occupational health and safety management system



403-2	Hazard identification, risk assessment and incident investigation		 
403-3	Occupational health services	Employees p.99 ARA 2019	 
403-4	Worker participation, consultation and communication on occupational health and safety	Chair's letter p.44 ARA 2019	
403-5	Worker training on occupational health and safety		
403-6	Promotion of worker health	People p.6-7 SR 2019 People positive p.28-30 SR 2019	 
Aspect: Training and Education			
103	Management Approach		
404-1	Average hours of training per year per employee	Fundamentals p.32 SR 2019	  
404-2	Programs for upgrading employee skills and transition assistance programs		
404-3	Percentage of employees receiving regular performance and career development reviews	Knowledge management p.33, 37 SR 2109	 

Aspect: Diversity and Equal Opportunity

103 Management Approach

405-1 Diversity of governance bodies and employees

Diversity and inclusion p.31 ARA 2019



Board diversity, composition and activity p. 48 ARA 2019

Responsibilities p.62 ARA 2019

More than just pay p.88 ARA 2019

Gender balance p.30 SR 2019

Human Rights

103 Management Approach

Aspect: Freedom of Association and Collective Bargaining

407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk



Aspect: Child Labour

408-1 Operations and suppliers at significant risk for incidents of child labour



Aspect: Forced or Compulsory Labour



409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour

Society

Aspect: Local Communities

103 Management Approach

413-1 Operations with local community engagement



Aspect: Public Policy

103 Management Approach

415-1 Political contributions



Product Responsibility

103-1 Explanation of the material topic and its boundary

103-2 The management approach and its components

Aspect: Customer Health and Safety

416-1 Assessment of the health and safety impact of product and service categories



416-2 Incidents of non-compliance

Aspect: Product and Service Labelling

417-1 Requirements for product and service information and labelling

417-2 Incidents of non-compliance

Aspect: Marketing Communications

417-3 Incidents of non-compliance concerning marketing communications

Aspect: Customer Privacy

103-1 Explanation of the material topic and its boundary

103-2 The management approach and its components

103-3 Evaluation of the management approach and measurement

418-1 Substantiated complaints regarding breaches of customer privacy



Aspect: Compliance

419-1 Non-compliance with laws and regulations in the social and economic area



Further Material Areas

Product Innovation



103-1 Explanation of the material topic and its boundary

103-2 The management approach and its components

103-3 Evaluation of the management approach and measurement

Quality Assurance



103 Management Approach

Responsible Business



103-1 Explanation of the material topic and its boundary

103-2 The management approach and its components

103-3 Evaluation of the management approach and measurement

Environmental Stewardship



103-1 Explanation of the material topic and its boundary

103-2 The management approach and its components

103-3 Evaluation of the management approach and measurement

Management Approach: Climate Action

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

Industrial development has powered humanity's journey towards a climate emergency. Now, smart science, innovation and collaboration are our most effective tools to start reducing our impact on the planet, society and our businesses and markets.

The need to address society's impact on climate change through a global reduction in GHG emissions is a hugely important aspect of our strategy and embedded in our 'Purpose, Commitment and Difference'. Our work in this area is driven by our own operational emissions reduction targets, alongside an understanding that our impact on emissions also encompasses our upstream and downstream supply chain, which includes our high usage of bio-based raw materials. This is in addition to the emissions avoided through the performance benefits our ingredients offer when in use by our customers and their consumers.

Business stakeholders are increasingly focused on this issue: customers and end users are insisting on low-carbon alternatives to GHG intensive products. Financial actors are demonstrating a greater appetite for companies who demonstrate resilience to climate-related risks and opportunities over short, medium & long-term horizons.

Our Purpose, Smart Science to Improve Lives™, sets out our ambitious goals to be Climate Positive, Land Positive and People Positive. We have a long history as a supplier of sustainable innovative ingredients and as we move through this decade, we must further accelerate our positive impact by creating and delivering solutions to tackle some of the biggest challenges the world is facing.

Contribution to value creation

As well as reducing our own carbon emissions through the optimisation of our operations, we also contribute to avoided greenhouse gas emissions with our numerous sustainable products that deliver 'in use' benefits to our customers. Inclusion of our products in customer formulations can offer many kinds of benefits in use: social, economic, and environmental, for both our customers and their

consumers. All new products launched during 2021, have a known sustainability benefit in use. Last year, we began to quantify the avoidance or reduction of GHG emissions associated with the use of our products by our customers or consumers in the end application.

Decreasing materials and energy consumption reduces cost and further increases the company's competitiveness, adding value throughout the value chain.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Boundary

Climate change is relevant for our own operations, our global supply chains, our customers, and the entire life cycle of our products.

GRI 103-2 The management approach and its components

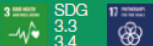


Resources and Responsibilities

At Croda, our two most senior committees, the Board of Directors and Group Executive Committee are ultimately responsible for our economic, environmental, and social performance and they maintain an active role in ensuring that sustainability remains an integral element of our business strategy. We have formed a Sustainability Committee whose focus is to understand and meet the intrinsic and extrinsic sustainability requirements of our customers and other stakeholders and align business and customer needs with corporate strategy in all aspects of product sustainability. This committee also own the delivery of our strategy and guide our senior committees on future strategy development. Our Chief Sustainability Officer provides full time focus on sustainability and offers direction for our Group Sustainability Team. However, our people recognise that mitigating climate change is the responsibility of all employees throughout the business.

Goals and targets

Our Commitment is to be the most sustainable supplier of innovative ingredients, being Climate, Land and People Positive by 2030, delivering positive impact and measurable contribution to the UN SDGs. This will be further amplified by working throughout the supply chain. The United Nations Sustainable Development Goals (SDGs) provide a vital framework to connect supply chains with suppliers upstream and customers downstream, synchronising efforts and maximising positive impact. In 2020 we set industry leading targets to be Climate, Land and People positive by 2030, compared to a 2018 baseline:

People Positive by 2030

Health & Wellbeing 			
Objectives	Targets	Milestones	2021 progress
We will use our smart science to promote healthy lives and wellbeing through the development and application of our ingredients and technologies.	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> By the end of 2024 our technology will be part of at least 10 clinical phase III trials across at least 25% of the WHO-listed pipeline vaccines By the end of 2024 we will protect one million lives from skin cancer through the use of novel sun protection technologies 	<ul style="list-style-type: none"> Developed a more detailed understanding of the projects in which our technologies are being used to develop WHO-listed pipeline vaccines Croda technology at various stages of evaluation in 15 out of the 24 pipeline vaccines, across 79 projects (2020: 32 projects) First novel sunscreen ingredients launched from Entekno partnership 55 million people protected annually through the use of Croda sun protection 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 leadership positions.	<ul style="list-style-type: none"> By 2030, we will achieve gender balance across the leadership roles in our organisation 	<ul style="list-style-type: none"> We are rolling out gender-balanced shortlisting recruitment across Croda, with a target of having 80% of shortlists gender balanced by the end of 2023 	<ul style="list-style-type: none"> Further progress made in reaching our gender balance target, with 36% of leadership roles now occupied by women (2020: 31%) Gender balance target incorporated for the first time in our long-term incentive plan for the most senior leaders (PSP) Croda main Board, as of February 2022, is gender balanced, with appointment of two new female non-executive directors
Improving More Lives 			
We will promote our smart science and help improve more lives using our technologies within relevant 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.	<ul style="list-style-type: none"> We will establish and fund a Croda Foundation to help improve one million lives in relevant communities 	<ul style="list-style-type: none"> Intermediate milestones for the Croda Foundation to be set during 2022 	<ul style="list-style-type: none"> First three projects approved for funding by the Croda Foundation Board of Trustees £2m additional restricted grant provided from Croda to the Foundation, to be invested in improving health infrastructure in regions with the greatest need Charity of the Year competition launched, and the British Heart Foundation became the first recipient of the £25,000 prize

GRI 103-3 Evaluation of the management approach and measurement

Evaluation and outcome

At Croda we monitor our climate impact by collecting and analysing data on energy consumption and greenhouse gas emissions across our business areas. Therefore, we track the trajectory necessary to achieve our environmental targets.

Since 2015, we also report on our Scope 3 emissions to meet growing expectations of external stakeholders regarding the development of a holistic climate strategy. This strategy includes a reduction in value chain emissions by opting for cleaner energy sources and engaging our supply chain using EcoVadis assessments.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

GRI 302: Energy

GRI 103-1: Explanation of the material topic and its boundary

Basis for materiality

Many chemical manufacturing processes are energy intensive, and we wholeheartedly accept the implications for climate change arising from green-house gases (GHG) associated with energy generation. We have carefully measured operational emissions of gases implicated in climate change and for more than 15 years we have set targets for their reduction. Improving cost-efficiency and conserving resources by managing energy consumption is of utmost importance to us and we aim to minimize emissions and the greenhouse effects from energy use.

Decarbonisation targets have been set for 2030 by our Group Executive Committee under the guidance of the SHEQ and Sustainability Committees to ensure actions can be taken to bring about change.

Contribution to value creation

Energy reductions enable increases in profitability, enhancement in the reputation of our products and helps to protect natural resources. Further, our sustainably developed products enable our customers to benefit from significant energy reductions in their processes as well as carbon benefits 'in use' during the lifetime of the end application.

Boundary

We continuously make energy efficiency improvements in our own operations and are increasingly influencing our supply chain to make reductions in energy use. Further, the in-use benefits of our products provide additional energy reductions in our customers end application.

GRI 103-2: The management approach and its components

In 2020, our 10 manufacturing sites with the highest emissions developed decarbonisation roadmaps to 2030. This involved firstly looking at each site's current energy requirements, identifying opportunities to decarbonise through energy use reduction, energy re-use and replacement with renewable energy. Sites then considered incremental improvements ranging from efficiency gains through to large transformational step changes such as replacement process technology. These

opportunities have then been quantified, exploring the financial and carbon-reduction impacts of the proposed changes, ultimately forming a ten-year roadmap to decarbonisation for each site.

Compared to 2020, our overall energy use has increased slightly by 1.5%, despite an 11% increase in production output. During this time, our energy intensity figure has fallen by 23%, a measure of our efforts to increase efficiency.

In 2021, 25% of the energy we used came from non-fossil fuel sources.

We are committed to reducing emissions in line with the science required to limit global warming to 1.5°C above pre-industrial levels. To achieve this, in 2021 we became only the third major chemical company globally to have a 1.5°C Science Based Target (SBT) verified and declare our ambition to become a net zero organisation by 2050.

GRI 103-3: Evaluation of the management approach and measurement

Indicators

We collect data on a quarterly basis to monitor our progress against targets and these data are used as a basis to improve efficiency and performance. During 2021 we adopted new Sustainability Reporting Software which we use to track the progress of projects related to environmental performance and capture any additional activities in this area. We also use this software to continue to improve Environmental, Social and Governance (ESG) performance and risk management.

GRI 302-1: Energy consumption within the organisation

For more than 15 years, we have carefully measured emissions of gases implicated in climate change and have consistently set targets for reduction. Increasingly demanding targets have been set for 2030 by our Group Executive Committee under the guidance of the SHE Steering Committee. To ensure actions can be taken to bring about change, all previous major SHE targets were set over a five-year time-period. However, our new targets have been set to a 2030 target deadline with interim milestones to allow us to monitor progress and proactively respond to challenges.

Total energy consumption in 2021 was 4,241,189GJ.

Direct energy consumption from non-renewable sources (GJ)	2018	2019	2020	2021
Natural gas	2,847,191	2,591,152	2,803,518.4	3,071,868
Light fuel oil	18,574	31,510	4,731.1	4,205
Heavy fuel oil	3,125	2,745	2,843.4	1,178
Gasoline	1,435	1,623	9,294.4	12,615
Propane/LPG	5,882	4,900	5,848.8	6,567
Diesel (Vehicle Fuel)	6,903	6,446	10,587.2	16,031
Total	2,883,110	2,638,375	2,836,823.3	3,112,464

Direct energy consumption from renewable sources (GJ)	2018	2019	2020	2021
Biofuel	11,387	14,393	0	0
Wind*	16,314	16,684	19,032	14,992
Solar*	3,435	826	5,196	5,839
Landfill gas	379,140	277,237	373,244.1	267,225
Waste	19,626	16,853	11,577.6	3,675
Total	409,801	312,892	409,468.7	291,731

*Self-generated

Self-generated electricity exported (GJ)	2018	2019	2020	2021
Wind/Solar	3,015	2,704	3,242	2,201
Total	3,015	2,704	3,242	2,201

Indirect energy consumed (GJ)	2018	2019	2020	2021
Electricity/steam: fossil	559,445	530,792	170,460.39	82,870
Electricity/steam: non-fossil			590,278.56	728,942
Total	685,949	672,296	760,738.95	810,109

Direct energy sources sold (GJ):

Direct energy sources sold (GJ):	2018	2019	2020	2021
Electricity	3,015	2,704	3,242	2,201
Steam	0	0	0	0
Total	3,015	2,704	3,242	2,201

Data is reported by sites on quarterly basis using meter readings or invoice data. International electricity conversion factors are taken from: International Energy Agency Data Services - 'CO₂ emissions from fuel combustion' latest available edition. Fuel conversion factors are taken from the Greenhouse Gas Protocol Initiative (GHG Protocol)

GRI 302-3 Energy intensity

Energy intensity for 2021 was 2,245 GJ per £1m turnover (2,915 GJ per £1m turnover in 2020). Energy intensity is based on our 'value added', which is operating profit before depreciation and employee costs. To calculate energy intensity, we divide energy consumption by value added. The types of energy included in the intensity ratio are electricity, fuel and steam consumed within the organisation.

GRI 302-4 Reduction of energy consumption

During 2021 our energy consumption increased due to an increase in production output volumes.

In 2020 our manufacturing sites that have the highest emissions developed decarbonisation roadmaps to ensure we can achieve our ambitious targets globally.

In 2021 our manufacturing sites have continued working to develop, refine and implement these decarbonisation roadmaps. This will ensure we can achieve our Science Based Target through energy efficiency projects, moving to alternative fuel sources and innovating to find less energy-intensive ways to manufacture. By the end of 2022 every location in the Croda world, including all offices, will have a validated roadmap. In this way we have started to move from ambition to action and are seeing projects focused on carbon reduction already being implemented. For example, the biomass boiler at Hull (see case study in 2021 Sustainability Report) and a low carbon sulfate-free

surfactants expansion project at our Rawcliffe Bridge manufacturing site. Use of an internal shadow carbon price (2021: £50/tonnes CO₂e) has supported these carbon-focused investment proposals.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

GRI 305-1 Direct (scope 1) greenhouse gas (GHG) emissions

We measure GHG emissions at all our manufacturing and non-manufacturing sites and until 2020 these were measured against a baseline year of 2015. From 2021 onward our emissions are measured against a 2018 baseline in line with our recently approved Science Based Targets (SBTs). Between 2015 – 2018 our Scope 1 GHG emissions have received limited verification in accordance with the requirements of the ISO 14064-3 standard by Avieco and between 2019 and 2021 we received reasonable verification by Avieco.

Scope 1 GHG emissions (tCO ₂ e):	2018	2019	2020	2021
Fossil Fuels	154,681	141,910	149,621	160,835

Since 2018, we have seen a 4% increase in Scope 1 CO₂ emissions.

Read more: <https://www.croda.com/en-gb/sustainability/our-commitment/climate-positive>

GRI 305-2 Energy indirect (scope 2) GHG emissions

Until 2020 we measured our GHG emissions at all our manufacturing and non-manufacturing sites against our baseline year of 2015. Between 2015 - 2018 our Scope 2 GHG emissions have received limited verification from Avieco in accordance with the requirements of the ISO 14064-3 standard and between 2019 and 2021 we received reasonable verification by Avieco.

Scope 2 GHG Emissions (tCO ₂ e)	2018	2019	2020	2021
Location Based	72,134	68,585	73,994	71,181
Market Based	54,311	39,164	27,843	21,628

Types of GHG included, as applicable: CO₂, N₂O, CH₄, HFCs, PFCs and SF₆. The baseline year data is 2018 for the current target period and is recalculated when we acquire or divest sites. Emissions factors are calculated using the GHG Protocol and International Energy Agency's published conversion factors and the methodology used is as per GHG Protocol Corporate Standard. Manufacturing and non-manufacturing sites which we have financial control of are included.

Scope 2 location-based emissions in 2021 decreased by 1.3% compared to the 2018 baseline.

Scope 2 market-based emissions decreased by 60.2% compared to the 2018 baseline.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

<https://www.croda.com/en-gb/sustainability/our-commitment/climate-positive>

GRI 305-3 Other indirect (Scope 3) GHG emissions

In 2021 we undertook a project to update our scope 3 emissions inventory, working with Avieco. This enabled a clear view of our supply chain emissions and allows us to identify areas for improvement. "The scope 3 enhancement has significantly improved Croda's footprint reliability through using best practice and more primary supplier data," said Julie Craig, Chief Commercial Officer, Avieco. "Granularity and repeatability have been key to the process and the improvements will enable Croda to better track their progress." In completing this work, we have identified that our 2018 scope 3 baseline is 104,461 tonnes CO₂e lower than originally calculated. This was primarily due to the accuracy of emission factors for our capital goods scope 3 category. Moving to a greater level of granularity and distance-based data for business travel has also resulted in a lower baseline for this category. However, through increased accuracy, we have identified a greater number of emissions associated with our purchased goods and services. This is our largest category, making up 83% of our upstream scope 3 emissions, the majority of which is raw materials. Through this work, we have also included emissions associated with our packaging for the first time.

Scope 3 GHG emission (tCO ₂ e):	2018	2019	2020	2021
Purchased goods and services	747,175	729,929	682,574	951,358
Capital goods	181,301	121,089	143,367	67,543
Fuel and energy related activities	37,584	33,765	34,799	39,337
Upstream transportation and distribution	105,103	103,103	103,307	67,842
Waste generated in operations	1,550	1,785	2,653	2,852
Business travel	19,487	20,926	11,349	3,978
Employee commuting	6,495	6,537	6,821	8,147
Total emissions	1,098,696	1,017,135	984,871	1,141,056

Types of GHG included, as applicable: CO₂, N₂O, CH₄, HFCs, PFCs and SF₆. The baseline year data is 2018 for the current target period and is recalculated when we acquire or divest sites.

In addition to the above stated scope 1, 2 and 3 emissions, Avieco has also verified the temporary biogenic carbon sequestration associated with one specific bio-based raw material Croda purchased in year ending 31st December 2021, as 271,783 tCO₂e. However, we note this figure does not consider the associated downstream emissions and therefore does not include any end-of-life emissions associated with its use.

Read more: <https://www.croda.com/en-gb/sustainability/our-commitment/climate-positive>

GRI 305-4 GHG emissions intensity

Since 2018, our baseline year, our total scope 1 and 2 greenhouse gas (GHG) emissions have reduced by 12.7%. Within this, scope 1 emissions increased by 4%, whilst we have seen a 60% reduction in scope 2 emissions. This has been driven by a switch to renewable electricity across our manufacturing sites. In 2021 we engaged with Accenture to help us explore electricity sourcing options for our manufacturing sites in Asia, where availability of green electricity is more challenging. Renewable Energy Certificate (RECs) purchases at Thane in India and Singapore have led to a significant reduction in emissions this year. Scope 1 and 2 GHG emissions from our UK operations were 34,055 tCO₂e in 2021 (2020: 35,073 tCO₂e) representing approximately 20% of our global GHG emissions. Our chosen measure of GHG emission intensity divides our GHG emissions (market-based scope 2 emissions) by value added², a measure of our business activity. Since 2018, our GHG emissions intensity has improved by 39%, illustrating how we are decoupling growth from our environmental impact. Our scope 1, 2 and 3 GHG emissions are verified by Avieco. Their formal independent verification statement is available at: <https://www.croda.com/en-gb/sustainability/our-commitment/climate-positive>

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Types of GHG included, as applicable: CO₂, N₂O, CH₄, HFCs, PFCs and SF₆.

GRI 305-5 Reduction of GHG emissions

As with all our environmental impact targets, we report data for manufacturing sites against a baseline year of 2018.

Since 2018, our baseline year, total scope 1 and 2 emissions have decreased by 12.7%, given that our business has expanded, and new capacity has been commissioned. Within this, scope 1

emissions have increased by 4.1%, and market-based scope 2 emissions have decreased by 60.5%. In 2021 we undertook a project to update our scope 3 emissions inventory, working with Avieco. This enabled a clear view of our supply chain emissions and allows us to identify areas for improvement. "The scope 3 enhancement has significantly improved Croda's footprint reliability through using best practice and more primary supplier data," said Julie Craig, Chief Commercial Officer, Avieco. "Granularity and repeatability have been key to the process and the improvements will enable Croda to better track their progress." In completing this work, we have identified that our 2018 scope 3 baseline is 104,461 tonnes CO₂e lower than originally calculated. This was primarily due to the accuracy of emission factors for our capital goods scope 3 category. Moving to a greater level of granularity and distance-based data for business travel has also resulted in a lower baseline for this category. However, through increased accuracy, we have identified a greater number of emissions associated with our purchased goods and services. This is our largest category, making up 83% of our upstream scope 3 emissions, the majority of which is raw materials. Through this work, we have also included emissions associated with our packaging for the first time.

Changes in total GHG emissions (tCO ₂ e):	2018	2021	% Difference
Scope 1	154,681	160,835	4
Scope 2 location-based	72,134	71,181	-1.3
Scope 2 market-based	54,311	21,628	-60.2
Scope 3	994,235	1,141,056	14.7

The baseline year data is 2018 for the current target period and is recalculated when we acquire or divest sites. Emissions factors are calculated using the GHG Protocol and International Energy Agency's published conversion factors and the methodology used is as per GHG Protocol Corporate Standard. Manufacturing sites and non-manufacturing sites which we have financial control of are included. Types of GHG included, as applicable: CO₂, N₂O, CH₄, HFCs, PFCs and SF₆.

Management Approach: Customer Privacy:

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

Direct customer engagement and a commitment to delivering thousands of innovative, sustainable solutions to thousands of customers lies at the heart of our commercial strategy. This requires an unrivalled level of customer engagement and intimacy on a global scale.

Contribution to value creation

By being close to our customers, both physically and strategically, we develop a deep understanding of their business development objectives. As well as being as close to our customers as possible, we add value by sharing market insight to identify future opportunities, engage R&D and provide sustainable solutions to improve performance. By becoming our customers' indispensable strategic partner, we help them satisfy their consumers' needs. Such insight enables us to not only fulfil customer needs, but also to stay one step ahead of the competition, anticipating new consumer demands and acting quickly to help customers capture new market opportunities.

Boundary

All our market sectors have tailored marketing teams that focus on strengthening relationships with customers.

GRI 103-2 The management approach and its components

Resources and Responsibilities

Each of our market sectors has a dedicated research, sales and marketing team who work in close collaboration with several departments within our customers' organisations and report to the Executive Committee. These touch points include research and development, marketing, production, purchasing, quality, regulatory and sustainability. Engaging with customers is essential to understand their needs and create continuous, profitable growth.

Further components

Through our Open Innovation and Smart Partnering Programmes with universities and small and medium enterprises, we identify unique opportunities that add value to our customers' products and satisfy the unmet needs of consumers. We are focused on innovation, with teams across our business dedicated to creating new and improved ingredients in collaboration with our customers.

GRI 103-3 Evaluation of the management approach and measurement

Evaluation and outcome

In addition to the feedback received from customer interactions throughout the year, we engaged in external stakeholder feedback exercises. Our Board also engages with customers through the Group Chief Executive and receives regular information about customers in the Group Chief Executive's Board Report and in other business Board reports.

Indicators

Sustainability and communication specialists, Black Sun, carried out recent interviews with representatives from our different stakeholder groups including customers. The feedback regarding their relationship with us was overwhelmingly positive, with stakeholders regularly using the terms 'innovative' and 'natural' unprompted.

Fostering these close relationships with our customers helps us to identify and find innovative solutions for unmet needs globally.

GRI 418-1 Substantiated complaints regarding breaches of customer privacy and losses of customer data

We respect the privacy of our customers, and our aim is to ensure the highest levels of accuracy, security, and confidentiality. Our company website contains details of our Privacy Policy and at any time we can be contacted with questions or concerns with respect to this policy. Contact details can be found in the Privacy Policy itself.

During the year we were not aware of any breaches of customer privacy, and we continue to apply good practice as defined in our Privacy Policy.

Management Approach - Product Innovation:

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

Sustainable Innovation is a key pillar of our business model which goes beyond delivering more value and benefit from ingredients with a lower environmental footprint. Today, more than ever before, we are innovating up and down the value chains. Creating new ingredients in our research

centres and in collaboration with our customers, suppliers and Open Innovation and Smart Partners, we are identifying and commercialising unique opportunities that add value to our customers' products, satisfy the needs of their consumers and improve lives.

Our innovations have the power to help tackle the global challenges associated with feeding and supporting a growing, ageing population, satisfying the expectations of digitally empowered and environmentally aware consumers who expect greater performance levels from products and services than ever before.

Living a culture of innovation is also an increasingly important factor in creating a compelling working environment. It contributes to employee motivation and thus helps us attract and retain people.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Boundary

Innovation is the lifeblood of our business. Success relies on our people's drive for continuous improvement, especially our technical and commercial experts as we focus on increasing our sales of new and protected products. We therefore strive to attract a diverse array of talent, develop our people, and foster a can-do attitude. As we expand into faster growth markets, we are increasing the number of our innovation centres in locations where our people can get closer to our customers.

Innovation within our business does not just mean inventing the new, but adapting existing science to different uses and markets, creating added sustainability and performance benefits for our customers and their consumers.

GRI 103-2 The management approach and its components

Responsibilities and resources

Our local specialists work as one global team, sharing knowledge to grow our extensive innovation pipeline and valuable protected intellectual property. Through our Open Innovation and Smart Partnering Programmes, we collaborate with world leading academics, universities, start-ups and technology specialists. At any one time we are working on more than 80 of these partnerships, with almost everyone having the potential to deliver a sustainability benefit, we constantly pursue new and novel technologies to address unmet consumer needs. Our innovation activities focus on products and processes, impacting the entire value chain from suppliers and internal operations to customers and end users. As a result of these collaborations with our partners and customers, we design new

products that help them meet their ever more demanding performance and sustainability needs. Our continued innovation in these areas is driven by our understanding of the intrinsic sustainability of our products, using techniques such as Life Cycle Assessment (LCA).

Goals and targets

Our 2030 target to complete life cycle assessments (LCAs) for our top 100 ingredients is driven by our commitment to understand the impact of our products beyond factory gates and take a proactive role in the transition to a circular economy. We are collaborating with LCA experts Ricardo to develop a bespoke cradle-to-grave LCA tool that follows ISO 14040 requirements and can be consistently applied to products across our business sectors.

GRI 103-3 Evaluation of the management approach

Evaluation and outcome

At the heart of our approach to meeting our Commitment is innovation, which has been the lifeblood of our success for many decades. Our business model has relied on creating new market niches with novel product offerings to drive growth. This approach remains relevant today, in the UN Decade of Action on the SDGs, with our innovation priorities focused on helping our customers and end markets deliver on the SDG targets, with 88% of new products directly contributing to our priority SDGs. Our innovation model is a decentralised one, with our R&D advances increasingly driven by our partnerships, often managed locally by one of our innovation centres around the world, close to customers and partners. This ensures we can respond to local variations in approach to solving for the SDGs, and access novel processes, raw materials and expertise through our partners.

Indicators

After continuous significant investment in our innovation pipeline sales of New and Protected Products (NPP) in 2021 were 37% (2020: 27%) of total Group sales.

Management Approach – Product Stewardship

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

From the sourcing of our raw materials right through to the delivery of a safe product to our customers, we are committed to responsible stewardship at every stage of the supply chain, ensuring that all relevant legislation and registrations are met.

Sustainability leadership goes even further and requires us to proactively pursue more sustainable and innovative solutions. We focus our portfolio towards products that consider all three dimensions of sustainability: economic, social and environmental. From 2018, we also increased our focus on solutions that support the United Nations Sustainable Development Goals (UN SDGs) as a moral business imperative.

Contribution to value creation

By responsibly sourcing our raw materials, maximising our use of bio-based raw materials and land use productivity, and ensuring the supply of safe and sustainable products through regulatory leadership we add value to our portfolio, preventing reputational or legal damage. Additionally, our product stewardship influences the raw materials we source and the impacts on the land use required to grow our bio-based raw materials.

Boundary

Product stewardship and sustainable chemistry applies to all product cycles from cradle to gate, as impacts can result from all phases of product development, operations, and downstream value chains.

We will take a leadership role in the life cycle assessment of our ingredients and their impact on the life cycle of our customers' products.

GRI 103-2 The management approach and its components

Responsibilities and resources

Product Stewardship principles are increasingly becoming enshrined within both chemical and end use legislation across the globe. We are actively engaged within trade associations and through meetings with government bodies working to shape the legislation and its effective implementation.

Our globally oriented approach ensures that local and regional product stewardship and Product Safety and Regulatory Affairs (PSRA) teams play an integral role in global Product Stewardship, supporting the business and providing external customer communication on all regulatory issues regarding the management of chemicals.

Goals and targets

We have several targets relating to product stewardship relating to upstream supply chain risks, RSPO certified palm oil, raw material traceability and deforestation. Our 2030 target to complete life cycle assessments (LCAs) for our top 100 ingredients is driven by our commitment to understand the impact of our products beyond factory gates and take a proactive role in the transition to a circular economy.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Further components

Our product stewardship practices are hugely important to the innovation process, capturing our regulatory work to ensure that the products we supply are safe and that we can provide customers with all the information they need.

GRI 416-1 Assessment of the health and safety impact of product and service categories

All our products are assessed for their health, environmental and safety impacts from the product development stage, with advice available to the end customers so that any identified risks are known and can be controlled.

Product concepts come from a variety of sources, including customer interaction, market awareness and emerging product trends. In all these areas our research teams liaise with our product safety and regulatory affairs department from the beginning of new product development to ensure that products are assessed for their health, safety, and environmental effects. Additional screening tests and modelling may be carried out depending on the expected end use of the product to enable safety assessments to be completed by our customers.

Our scientists ensure that our products meet as many of the 12 Principles of Green Chemistry as is reasonably practical. A number of these relate to reducing harm to human health during development,

manufacture, and end use. Wherever practically possible we stick to the principles relating to health and safety from the 12 Principles of Green Chemistry:

- Wherever reasonably practicable, synthetic methodologies should be designed to use and generate substances that possess little or no toxicity to human health and the environment.
- Chemical products should be designed to preserve efficacy of function while reducing toxicity.
- Chemical products should be designed so that at the end of their function they do not persist in the environment but do break down into innocuous degradation products.
- Analytical methodologies need to be further developed to allow for real-time, in-process monitoring and control prior to the formation of hazardous substances.
- Substances and the form of a substance used in a chemical process should be chosen to minimize potential for chemical accidents, including releases, explosions, and fires.

These principles are embedded in our new product development processes.

We have controls in place within our Enterprise Resource Planning System to ensure that a safety data sheet is produced for all products prior to manufacture to ensure that they are assessed against the criteria of the United Nations Globally Harmonized System (GHS) of Classification and Labelling of Chemicals so that all health, safety and environmental aspects can be considered for manufacturing, production, storage, distribution, supply and end product use.

During the manufacture of our products the risks to health and safety are managed by the Safety Health and Environment (SHE) department at each of our manufacturing sites. There are policies and procedures in place to ensure process safety and quality control. Our manufacturing sites around the world are certified to the ISO14001 standard and accredited to the OHSAS 18001 standard for safety management. We are committed to Responsible Care®, which underlines our commitment to SHE improvement. There are procedures and systems in place to ensure the safe storage of hazardous chemicals; this information is passed on to our customers where applicable. We have systems and procedures in place to deal with any transportation issue or emergency that may affect surrounding communities.

We ensure that all the products that we supply are accompanied by a material safety data sheet (MSDS), which details any health and safety issues with the product as well as environmental effects such as persistence and bioaccumulation. This goes beyond our legal requirements, where MSDSs are only required in specific circumstances and all our products are labelled according to regulatory requirement in the regions in which they are sold.

Our sales and marketing teams work closely with our research teams and regulatory department to ensure that any details that are provided to customers relating to health and safety are accurate and reflect the information that is sent out with the products that we supply.

There is a move within chemical control legislation to require that risk assessments be completed to ensure that any hazard associated with a product is adequately controlled from the manufacture of the product through to its end use and associated service life. In many jurisdictions' chemicals requiring assessment are prioritised based on known hazards. Within Europe this requirement is captured under the REACH regulation (Regulation (EC) No 1907/2006). The EU chemicals regulation, REACH, concerning the Registration, Evaluation, Authorisation and restriction of Chemicals, came into force on 1 June 2007 creating a single regulatory system for dealing with chemical substances.

To conform to REACH regulations, each producer and importer of chemicals in volumes of one tonne or more per year must register them with the European Chemicals Agency (ECHA) and submit information on their properties, uses and safe ways of handling them. This registration obligation has been phased in with three key deadlines according to volume and hazard. Phase 1 was completed in December 2010 for volumes >1000 tonnes per annum (tpa) and certain high hazardous substances. Phase 2 had a deadline of 1 June 2013 for volumes ≥ 100 tpa. The phase 3 deadline was 1 June 2018 for all substances ≥ 1 tpa.

We have played a lead role in REACH registrations since the beginning, with our Product Safety and Regulatory Affairs team working to coordinate the generation and gathering of information to support registrations for products across the whole portfolio. As of 2017, registrations have been submitted in all three phases with the final phase being the most important in terms of the range of products captured.

In general, our products comprise a small percentage of the final product, so it is a challenge for us to manage the health and safety implications in finished products. By providing good quality information and data to our customers we allow them to make informed decisions and accurately determine if there could be any potential issues for end consumers.

Our control over the ultimate disposal of the goods that contain our products is also limited, however we control what we can by ensuring that our products are as environmentally friendly as possible by examining biodegradability and persistence and have minimal potential impact to human health in terms of toxicity and bioaccumulation.

We have formal procedures in place to capture any non-compliance with regulations or codes relating to the health and safety of our products. We have a formal complaints procedure and all our customers have at least one sales contact within the business. It is our intention to enhance this procedure to further embed it within our business to capture any issues or areas of potential risk.

GRI 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services

We have formal procedures in place to capture any non-compliance with regulations or codes relating to the health and safety of our products. We have a formal complaints procedure and all our customers have at least one sales contact within the business. It is our intention to enhance this procedure to further embed it within our business to capture any issues or areas of potential risk.

During the year we were not aware of any incidents relating to non-compliance in this area.

GRI 417-1 Requirements for product and service information and labelling

Due to strict legislation within the chemical industry around product labelling, we ensure that we conform to all regulations in the regions in which we operate, and we aim to exceed these standards where possible.

We require information related to health and safety and the labelling of products from all our suppliers, this information is collected at each manufacturing site and is passed on to our product safety and regulatory affairs department. In general, this information is received in the form of a

material safety data sheet (MSDS), but where we require more information for regulatory purposes, we work with our suppliers to gain the data that we require.

The procedure for the MSDS means that 100% of our products are required to be labelled with information relating to content, safe use and disposal of the product. The sourcing of the components of the product is not given on the MSDS but it is stored in our procurement system SAP if the information is required by the customer.

All products are assessed against the relevant national and international chemical labelling legislation to ensure that the health, safety and environmental hazards of the product are assessed, and the appropriate hazard and precautionary statements are used. Information about safe handling and use of our products is passed on to our customers in MSDSs and product safety information statements.

We work closely with our customers to ensure that our chemicals are sufficiently assessed for safe use in end consumer products and ensure that any environmental or health impacts of our products are identified. As our products are generally used as a small percentage of end consumer goods, the information that we provide to our customers is vital for them to accurately determine any potentially harmful effects of their formulations for consumers or the environment.

Any potentially hazardous effects of our products to human health or the environment are identified and clearly shown on our product labels and in the MSDSs that we provide to our customers. These include, amongst others, biodegradation, persistence, bioaccumulation and toxicity.

GRI 417-2 Incidents of non-compliance concerning product and service information and labelling

We continue to monitor and adapt to any changes in national and international chemical labelling legislation across the world and it is our policy that all products are supplied with a Material Safety Data Sheet (MSDS), which is a detailed informational document that describes the physical and chemical properties of the product.

During the year we were aware of 45 separate incidents where labelling did not meet local requirements or voluntary codes. None of these isolated incidents resulted in fines, penalties or warnings.

In most instances this was an issue of a missing local language in other cases we rectified the issues as soon as they were identified and at no time was health and safety compromised.

GRI 417-3 Incidents of non-compliance concerning marketing communications

We will continue to comply with regulations and voluntary codes relating to marketing communication and promotion and will continue to monitor and improve our processes and procedures in this area. During the year we were not aware of any incidents relating to non-compliance in this area.

Non-compliance with laws and regulations in the social and economic area – management approach

We endeavour to prevent non-compliances and always operate within the boundaries of our legal permits. Other than financial liabilities such as remediation activities, non-compliance can lead reputational impacts and affect our ability to develop our operations or acquire permits.

Our production processes have the potential to give rise to concerns or grievances from local communities and other stakeholders. Complaints can arise due to odour or noise or, in extremely rare circumstances, because of an environmental escape. As well as our formal Speak Up mechanism, some operations provide the community with a dedicated, direct line of contact to the appropriate person at the location.

Our Intellex reporting system captures and consolidates monthly and annual data on key safety and health, environmental, and other sustainability parameters from our global operations and we independently assure selected KPIs annually. This data allows us to benchmark individual operations and identify opportunities for improvement and best practice sharing across the Group.

Taking this approach allows us to operate legally, to respond accordingly, to remediate any negative impact and prevent future occurrences.

GRI 419-1 Non-compliance with laws and regulations in the social and economic area

During the year we were not aware of any incidents relating to non-compliance in this area.

Management Approach: Quality Assurance

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

Our customers rightly expect the same quality and standards from all our businesses and from each of our manufacturing locations. We can be supplying customers from multiple manufacturing sites, and as a global business we seek to standardise and unify the quality standards to which we operate in all parts of the world.

Contribution to value creation

High levels of quality are essential to achieve our business objectives. Quality, as a source of competitive advantage is a hallmark of our products and services. For us, high quality is not an added value; it is an essential basic requirement. Quality does not solely relate to the end products and services we provide but also relates to the way our employees do their job and the work processes they follow to produce products or services. Our work processes aim to be as efficient as possible and continually improving. Our employees constitute the most important resource for improving quality.

Boundary

Some quality standards specifically relate to our manufacturing sites. For example, our sites which produce personal care ingredients have implemented EFCi GMP standards with 14 sites certified globally. Although this is a European standard, we chose to implement it in America and Asia, exemplifying our uniform and consistent approach to quality.

Similarly, for our sites manufacturing health care excipients, we have EXCiPACT certification in all regions. Beyond these, our certification for other increasingly important and differentiating standards, including RSPO and Halal, extend to our sites in all regions.

For our recently acquired subsidiaries and our larger non-manufacturing sites, great progress has been made to implement ISO9001 with 100% of designated locations now having achieved certification.

Management Approach: Environmental Stewardship

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

Our commitment to ethical practice and environmental sustainability is reflected in our conscientious approach to managing resources and the environment. Pursuing energy efficiency, refining operations, and reducing emissions through behavioural and technological changes helps us reduce our impact on the environment.

Materials

By being close to our customers we understand and fulfil their needs, finding new ways to improve sustainable product performance and reduce environmental impacts. In 2016 we introduced the concept of intrinsic and extrinsic sustainability benefits. Intrinsic refers to attributes such as renewable raw material content, product purity and cradle-to-gate life cycle assessment data.

In 2021, 69% (67% in 2020) of the organic raw materials that we used were from renewable sources, a unique position amongst our peers in the speciality chemical manufacturing industry. The growth of crops from which many of our raw materials are derived, removes CO₂ from the atmosphere, resulting in low carbon footprints for many of our products. The extrinsic sustainability impacts of our products include the social, environmental and financial benefits that our products have in use. We are working to quantify these benefits for some of our product application areas, calculating associated carbon savings.

Fourteen of our manufacturing sites are Roundtable on Sustainable Palm Oil (RSPO) Supply Chain Certified to handle sustainable Palm derivatives via physical supply chains. These certified sites handle more than 99% of our palm derivatives.

In 2018 we further strengthened our commitment by working with a third party, independent organisation to confirm transparency of our supply chains, collecting data from major suppliers, responsible for 80% of the volume of palm derivatives we use. We have identified the mills associated with this volume, including location and GPS coordinates, and ongoing work using these data will inform a risk assessment of the sourcing areas and ensure progress towards fully sustainable and deforestation-free sourcing.

Waste Management

Waste Management is highly regulated subject and is an important theme the chemical industry. For us, dealing with waste responsibly is not only a sustainability issue, but also an operational issue as with increased waste come higher costs for the business. Process efficiency, which generates increased yields, contributes to our profitability via associated volume reductions in the waste stream.

Water

Responsible water management is a critical concern for the chemical industry as water is used in many production processes. We use water for a variety of purposes in the production of our ingredients which generates wastewater effluent.

Biodiversity

We are a beneficiary of ecosystems services which provide a variety of provisioning, regulatory and cultural services. Critical resources such as clean water, energy and flood protection benefit us as well as society at large and we take great care in monitoring and remediating any impact we must protect these gifts from the natural environment.

Contribution to value creation

Waste Management

Our approach to waste management reduces the risk of environmental harm as well as the associated costs of waste management, adding value. Our efforts in this are linked to our sustainable strategy and demonstrate integrity throughout our global operations.

Water

Efficient water management not only reduces costs associated with wastewater treatment but protects this vital resource. By innovating in product design and manufacturing processes we aim to lead the way in efficient water use in a chemical industry setting at our operations across the globe, especially in those areas of water insecurity or stress.

Protection of Ecosystems

As responsible stewards of ecosystems and the services they provide, we contribute to the future availability of these essential resources to humanity and the natural world.

Boundary

We focus on the impacts of our own operations, which can be monitored and controlled directly. Increasingly, we are also taking account of impacts along our supply chains.

Waste Management

We ensure that as little waste as possible is generated during the development and manufacture of our products. Our sites are carefully monitored to gather data on which sites create the most waste over a defined period, the make-up and classification of the waste and which waste stream it belongs to e.g., recycled, landfill, hazardous.

Water

We use water in all our operations. Most of our water consumption is for cooling and washing across our sites and so is “borrowed” and returned through effluent treatment. We do not put much water into our products.

Biodiversity

A review of the locations of our 19 manufacturing sites did not identify any sites that are in, or adjacent to protected areas or in areas of high biodiversity according to the Ramsar Convention on Wetlands and UNESCO World Heritage Sites.

As our manufacturing sites are mainly located in industrial areas, sensitive habitats are normally unimpacted.

We have identified that six of our manufacturing sites are close to some areas of high biodiversity, which are Hull (UK), Rawcliffe Bridge (UK), Campinas (Brazil), Mevisa (Spain), Cikarang (Indonesia) and Shiga (Japan). We are managing the environmental impact of these sites at a local level and setting targets to ensure that we minimise our impact on the environment by effectively managing the material business risk of Environmental Impact.

Further, we have helped to develop guidance for compliance with the Nagoya Protocol, an international agreement that aims to fairly share benefits that come from using genetic resources (GRs), the final objective being the sustainable use of biodiversity globally. We have been a constant voice in driving industry transformation to RSPO (Roundtable on Sustainable Palm Oil) certified physical supply chains, contributing to over 30 industry presentations, panel debates and media interviews on the issues around sustainable palm oil.

GRI 103-2 The management approach and its components









Responsibilities and resources

At Croda, the Group Sustainability Team support the various businesses with operational and strategic activities, by providing input on product development and guiding the wider group sustainability agenda. Whilst these functions set and monitor standards, operational responsibility resides with each site, which also nominates a responsible person for day-to-day operational SHEQ matters.




Goals and targets



By 2030, we aim to be Climate, Land and People Positive:

Climate Positive

Reducing Emissions  SDG 7.2  SDG 9.4  SDG 13.2			
Objectives	Targets	Milestones	2021 progress
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.	<ul style="list-style-type: none"> By 2030, we will have achieved our SBTs, in line with limiting global warming to 1.5°C Thereafter, by 2050 we will be a net zero organisation 	<ul style="list-style-type: none"> A reduction of 25% in 2018 absolute scope 1 and 2 emissions by the end of 2024 All Croda locations to have a decarbonisation roadmap by the end of 2022 	<ul style="list-style-type: none"> Absolute scope 1 and 2 emissions have reduced 12.7% since 2018, despite a 5.8% increase in output volume, as we decouple business growth from environmental impact Non-manufacturing sites were engaged in roadmap setting with the support of regional champions, with 25% completed
Carbon Cover  SDG 7.3  SDG 13.2  SDG 17			
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.	<ul style="list-style-type: none"> By 2030, use of our products will avoid four times the carbon emissions associated with our business-our 4:1 carbon cover 	<ul style="list-style-type: none"> Two million tonnes of CO₂e emissions savings delivered through use of our products by the end of 2024 100% of our product portfolio evaluated for downstream scope 3 impact by the end of 2024 	<ul style="list-style-type: none"> 951,000 tonnes CO₂e were avoided through the use of ingredients attached to verified case studies, giving a carbon cover ratio of 0.8:1
Sustainable Innovation  SDG 12.2  SDG 17			
We will accelerate the transition to bio-based products, moving away from fossil/petrochemical feedstocks.	<ul style="list-style-type: none"> By 2030, over 75% of our organic raw materials by weight will be bio-based, absorbing carbon from the atmosphere as they grow 	<ul style="list-style-type: none"> 71% (rolling three-year average) of our organic raw materials to be bio-based by the end of 2024 	<ul style="list-style-type: none"> Our use of bio-based organic raw materials increased by two percentage points from 67% to 69% A multidisciplinary working group identified all current petrochemical-based raw materials that could be replaced with bio-based alternatives

Land Positive

Land Use			
Objectives	Targets	Milestones	2021 progress
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.	<ul style="list-style-type: none"> Throughout this decade, the land saved through the application of our crop protection and seed technologies will exceed any increase in land used to grow our raw materials by at least a factor of two, and by 2030 we save at least 200,000 hectares per year more than in 2019 	<ul style="list-style-type: none"> By the end of 2024, the land area saved through use of our technologies will be at least 80,000 hectares per year more than in 2019 	 SDG 2.3  SDG 12.2  SDG 15.2
			<ul style="list-style-type: none"> We continue to work with our key suppliers to gather details of improvements in yield, GHG data, soil health, water consumption and protection of biodiversity We have validated our land-saving data for our adjuvant technologies through extensive field trials with a key customer in Brazil We saved 33,734 hectares per year more than our 2019 baseline year and remain on track to hit our 2024 intermediate milestone and 2030 target

Crop Science Innovation			
Objectives	Targets	Milestones	2021 progress
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.	<ul style="list-style-type: none"> 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 and protect biodiversity. We will work with customers, universities and business councils to achieve this 	<ul style="list-style-type: none"> By the end of 2024, we will have brought 10 qualifying technological breakthroughs to market 	 SDG 13.1  SDG 15.2
			<ul style="list-style-type: none"> We define a technological breakthrough as a new technology with a measurable significant effect and either a more sustainable route to an existing performance effect, or a new performance effect from an existing technology platform that is in line with our SDG goals We launched a second microplastic-free seed coating technology, extending our impact into key field crop markets Our research programmes were reconfigured to focus more explicitly on sustainability-led technologies that will drive our increasing benefits for nature and biodiversity We have secured our first commercial sale of microplastic-free seed coatings

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Further components

We are committed to the International Council of Chemical Associations' Responsible Care® initiative. This initiative promotes shared responsibility between chemical producers, suppliers and customers and requires close, sustained dialogue and working relationships between all stakeholders. This means sharing information up and down the value chain to identify and manage risks, and to ensure that chemicals are used and managed safely and responsibly throughout their lifecycle.

Waste Management

Our performance in waste management has continuously improved over recent years due to programmes rolled out globally and individual sites continuing efforts.

2021 saw a further reduction in our process waste sent to landfill: we have now achieved a 21.4% reduction compared 2018, going a long way to our fundamental goal of zero process waste to landfill by 2024. We recycle or reuse materials wherever possible to avoid sending waste to landfill and each category of waste is identified and analysed. Disposal methods must be documented in internal records. In 2021, 8 of our principal manufacturing sites sent zero waste to landfill, therefore reducing potential adverse consequences for the environment.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Water

The impact of our water use is very dependent on geographical location and so we are working to develop a water impact measure which will consider the quantity of water withdrawal as well as level of water stress at source, water displacement effects and quality of discharged water. We have also developed an industry leading 2030 target to reduce our water use impact by 50% from our 2018 baseline.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Protection of Ecosystems

In 2021, 69% of the raw materials we used were from renewable sources, a unique position amongst our peers in the speciality chemical manufacturing industry. The growth of crops from which many of our raw materials are derived, removes CO₂ from the atmosphere, resulting in low carbon footprints for many of our products. The extrinsic sustainability impacts of our products include the social, environmental, and financial benefits that our products have in use. We are working to quantify these benefits for some of our product application areas, calculating associated carbon savings.

Fourteen of our manufacturing sites are Roundtable on Sustainable Palm Oil (RSPO) Supply Chain Certified to handle sustainable Palm derivatives via physical supply chains. These certified sites handle more than 99% of our palm derivatives.

In 2018 we further strengthened our commitment by working with a third party, independent organisation to confirm transparency of our supply chains, collecting data from major suppliers, responsible for 80% of the volume of palm derivatives we use. We have identified the mills associated with this volume, including location and GPS coordinates, and ongoing work using these data will inform a risk assessment of the sourcing areas and ensure progress towards fully sustainable and deforestation-free sourcing.

GRI 103-3 Evaluation of the management approach and measurement

Evaluation and outcome

At Croda, our Group Sustainability Team exchanges knowledge between stakeholders within the business to reduce environmental impacts. In addition, our Sustainability Committee identify bottlenecks and generate new ideas to achieve our 2030 targets. Participants in these groups include representatives from around the business including the Chief Sustainability Officer, Group HR Director, Global Head of Procurement and Sustainable Sourcing, President of Global Operations and Chief Scientific Officer amongst others, who are the main stakeholders in implementing sustainability strategies.

Indicators

We collect data on a quarterly basis to monitor our progress against targets and these data are used as a basis to improve efficiency and performance. Our new corporate sustainability reporting software, SpheraCloud, is used to track the progress of projects related to environmental performance and capture any additional activities in this area.

Waste Management

Indicators monitored include the weight of hazardous and non-hazardous waste by disposal method as well as the number and volume of significant spills.

Water

We will protect the natural environment through the responsible management of our water consumption. We commit to reducing our water use impact by 50% from our 2018 baseline by 2023 and by 25% from 2018 baseline by the end of 2024.

We have recently refined and rolled out our new water impact methodology on a trial basis to six of manufacturing sites and our manufacturing site at Shiga, Japan reduced water withdrawal by 75% following investments to use recycled water.

We were also awarded a rating of B by CDP in 2021 for our performance on water reporting and conservation, maintaining our strong position. We monitor several water-related indicators, including total volume withdrawn by sources, water consumption related to production and discharge volumes to various water sources.

Protection of Ecosystems

We track parameters including the number of manufacturing sites located in biologically or water stress sensitive areas.

We also participate in end-to-end supply chain engagement with palm oil producers to tackle the issue of deforestation and to ensure transparency and sustainable practices.

We also develop ingredients using sources derived from Brazilian biodiversity and the greatest challenge of regulatory compliance in biodiversity is that each country defines the mechanisms of regulation. We have a responsibility to assure our customers of the compliance of our products and our Product Safety and Regulatory and Affairs (PSRA) department has registered more than 70 products with the Ministry of the Environment. This enables our customers to register their final products using our ingredients from these sources.

GRI 301-1 Materials used by weight or volume

Partial Reporting

The foundation of our business rests upon natural ingredients, with a large percentage of our raw materials originating from organic, renewable sources. In 2021, 69% of our raw materials came from natural, renewable sources and biotechnology. The growth of crops from which many of our raw materials are derived, removes CO₂ from the atmosphere, resulting in low carbon footprints for many of our products.

% Raw materials	2018	2019	2020	2021
Renewable materials	65	63	67	69
Non-renewable materials	35	37	33	31
Total	100	100	100	100

The above data covers all external global spend on raw materials and process aids and is readily extracted from our SAP system and characterised as being renewable or non-renewable. We do not report product tonnage because it is commercially sensitive. The data also does not include materials for packaging purposes as we currently do not have systems in place to record this data.

GRI 303-3 Water withdrawal

Total volume of water withdrawn by source:

Water withdrawal by source (m³)	2018	2019	2020	2021
Total surface water	2,526,721	2,127,570	3,161,368	2,882,099
Total groundwater	3,024,935	2,716,758	1,584,358	1,788,306
Total municipal process water	164,538	135,672	137,248	176,218
Total municipal mains water	2,211,812	2,165,322	2,217,129	2,242,457
Total water	7,928,006	7,145,322	7,100,093	7,089,079

GRI 303-5 Water consumption

Water consumption (ML)	2018	2019	2020	2021
Total surface water	2,527	2,128	3,161	2,882
Total groundwater	3,025	2,717	1,584	1,788
Total municipal process water	165	136	137	176
Total municipal mains water	2,212	2,165	2,217	2,242
Total water	7,928	7,145	7,100	7,089

GRI 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

A review of the locations of our manufacturing sites did not identify any sites that are in, or adjacent to protected areas, or in areas of high biodiversity according to the Ramsar Convention on Wetlands and UNESCO World Heritage Sites.

We have identified that six of our manufacturing sites are close to some areas of high biodiversity, which are Hull (UK), Rawcliffe Bridge (UK), Campinas (Brazil), Mevisa (Spain), Cikarang (Indonesia) and Shiga (Japan). We are managing the environmental impact of these sites at a local level and setting targets to ensure that we minimise our impact on the environment by effectively managing the material business risk of Environmental Impact.

Our operation at Hull is near the Humber estuary, which is designated as a Special Area of Conservation (SAC) and a Special Protection Area (SPA), as well as being designated as a UNESCO Ramsar Wetland. The river Hull next to the site flows to the Humber estuary and we have a local team in place to continually monitor our effluent discharge. We have also instigated several projects on the site to encourage biodiversity including planting indigenous trees on the boundary of the site to support local wildlife and re-establishing a marsh and pond area on site to support local biodiversity. A biodiversity study has also been conducted at the site by an independent expert and we are in the process of implementing the recommendations.

Our operation at Shiga is near to Biwa-ko, the largest freshwater lake in Japan, which is designated as a UNESCO Ramsar Wetland. The river Uryu is next to the site and leads to Biwa-ko, but as at our Hull site, we have a local team in place that continually monitors our water usage and effluent discharge. Our management teams and SHE experts are working hard at Shiga to reduce our water usage, which will reduce our local environmental impact. A team from the site also volunteers every year to help manage the river weeds along the Uryu to support local biodiversity.

GRI 304-2 Significant impacts of activities, products, and services on biodiversity

We understand that our operations may have an impact upon local biodiversity, and we take the stewardship of our own land very seriously. Therefore, we will continue to review our impact on land, water, and air.

For more than 16 years we have carefully monitored our environmental impact and set targets to reduce this at all our manufacturing sites. Reductions in energy and water usage, emissions to air and water and waste production, which has a continuing positive effect in reducing our impact on biodiversity in the areas in which we operate.

Our emissions and waste production have been carefully monitored by our Safety, Health and Environment (SHE) team to ensure that we reduce our impact wherever possible and are responsible in the disposal of liquid effluent or solid waste. In 2021, our sites were >94% compliant with liquid effluent discharge consents. We also reduced our waste to landfill by 22% in 2021 compared to our 2018 baseline.

Our new product development teams are committed to making our products as environmentally friendly as reasonably practicable. We aim to reduce the use of environmentally harmful chemicals by finding greener, safer alternatives and always take precautions with any chemicals that could pose a risk to the environment, often going beyond the standards required by legislation.

There are several key areas where we have influenced our suppliers and customers to provide sustainably sourced raw materials to ensure the preservation of biodiversity.

Together for Sustainability

Operating since 2011, Together for Sustainability (TfS), is a joint initiative and global network of companies assessing the environmental, labour, and human rights, ethical and sustainable procurement performance of their suppliers. We have followed the progress and growth of TfS which is based on the UN Global Compact and Responsible Care® principles and now includes 29 chemical companies with which our supply chains increasingly interconnect. In 2020 we completed an assessment of membership criteria, including benefit to enhancing our sustainable supply chain metrics, and in 2021 we became active members, collaborating on mutual supply chain transparency helping to develop industry wide standards for data sharing.

In addition to our own supplier engagements, we seek third-party certifications to validate the sustainability credentials of our suppliers and their raw materials. These partnerships include International Sustainability and Carbon Certification (ISCC), Roundtable on Sustainable Palm Oil (RSPO), USDA BioPreferred®, and the Union for Ethical BioTrade (UEBT).

Sustainable Palm Derivatives

Our leadership in supporting sustainable palm derivatives is acknowledged widely by customers and suppliers. In 2021 85% of our global palm derivatives consumption was RSPO physically certified by Mass Balance. In Europe and the Americas, we achieved 99% transformation to RSPO, whereas in Asia we continue to face challenges completing the conversion. Working with Action for Sustainable Derivatives (ASD), in 2020 >94% of purchased volumes in mapped back to either refineries, mills or plantations.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Action for Sustainable Derivatives

We are a founder member of Action for Sustainable Derivatives (ASD), a collaborative initiative that promotes responsible sourcing. ASD has accelerated the transformation of the palm derivatives industry towards compliance with 'No Deforestation, No Peat, No Exploitation' (NDPE) principles. Through ASD we work with a third-party consultancy, Transitions, to conduct supplier investigations to ensure full compliance with these principles.

GRI 306-1 Water discharge by quality and destination

In 2020 we set a target to reduce our water use impact by 25% from a 2018 baseline by the end of 2024. Our compliance with effluent discharge consents for 2021 was >94%. There remains a small number of sites that have occasional issues with wastewater, usually down to external factors such as weather. In 2016 we took the decision not to continue with effluent discharge compliance as a public target. Internal monitoring continues to maintain tight control of our effluent treatment plants.

Total volume of planned and unplanned effluent discharges (m ³):	2018	2019	2020	2021
Discharged to surface water	5,157,329	4,684,644	4,714,075	4,557,732
Discharged to treatment works	1,545,902	1,488,304	1,489,687	1,476,226
Total discharged	6,703,231	6,172,968	6,203,762	6,033,958

Data reported quarterly by our manufacturing sites and is taken from utility company invoices or from direct reading.

Compliance of samples analysed, and results are compared against consent limits issued by local regulators for those manufacturing sites which have a permit to discharge.

GRI 307-1 Non-compliance with environmental laws and regulations

Avanti, Alabaster, US, received a notice of violation for operating without an appropriate permit for its emissions to air. The site has since resubmitted its application as part of its expansion project and approval is expected in the first half of 2022.

Management Approach: Process Safety and Health, Safety & Wellbeing

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

As a global employer, we have committed to promoting a workplace culture of health and wellbeing. Process safety is a top priority for us and ensures manufacturing operations and the health and safety of our employees meets reputational and legal requirements. Failure to meet health, safety and wellbeing requirements can have an adverse effect on, health, productivity, employee morale, labour, and operational costs. Further, our brand image can be adversely affected by negative incidents involving health, safety, and wellbeing.

Contribution to value creation

We add value by minimising the risk of health, safety, and well-being incidents and therefore potential liabilities concerning both its people and the wider environment. We also accept that the mental and physical wellbeing of staff is a precondition for strong performance and retention of talent.

Boundary

Health, safety, and well-being are crucial for all our business areas, including management-controlled joint ventures including our contractors as well as our employees.

GRI 103-2 The management approach and its components

Responsibilities and resources

Our Group Safety, Health, Environment and Quality (GSHEQ) specialists operate in all regions and countries. The wellbeing of our employees is supported by local, regional and global HR (Human Resources) teams and initiatives in support of this occur regularly around the globe. The reporting of incidents is actively encouraged across all areas of the business and is the responsibility of the SHE Manager in each of our operations. All significant incidents and near misses are investigated by trained SHE personnel across the Group, with the ultimate management of such reviews resting with

our Group Executive Committee, which receive a quarterly report through the SHE Steering Committee. In addition to this, our risk management procedure ensures that all our regional boards review potential health and safety risks at least twice per year.

Goals and targets

We are focused on a target of zero work related accidents and a desire to entrench health & safety into the day-to-day life of all operations. Achieving the target of Total Recordable Injury Rate (TRIR) in the top quartile of chemical manufacturing companies with more than 1,000 employees also demonstrates our dedication to our people and the difference we make.

Further components

Read more: GRI 403-1 Occupational health and safety management system

Read more: GRI 403-2 Hazard identification, risk assessment, and incident investigation

GRI 103-3 Evaluation of the management approach and measurement

Evaluation and outcome

To protect our employees from occupational hazards each of our site locations undergoes systematic assessment related to temperature, humidity, illumination, sound, air quality and ergonomics. Minimum working requirements are well defined for each of these parameters and workplaces are redesigned to these requirements when they are not met. We regularly examine the health of our employees at our manufacturing sites, with some locations requiring extensive health checks to ensure the safety of all employees on site. We employ medical health professionals to perform health checks and anonymous reporting of findings to Group HR. This information is used to inform mandatory workplace risk assessments and dictates whether further personal health monitoring is required. We always maintain medical confidentiality.

Indicators

From 2016 we have adopted the American Occupational Safety and Health Administration (OSHA) standard for workplace injury reporting and have re-based our historical data to this standard. We focus on Recordable Injuries and SIF (serious injuries and fatal accident potential).

Safety Deviations and all Process Safety Events are continuously monitored at respective sites and quarterly at a global level. When we detect a pattern in Process Safety Events that must be corrected, the responsible site is contacted and instructed to take corrective actions.

GRI 403-1 Occupational health and safety management system

To ensure operational health and safety, we have several policies and an overarching Group SHE Manual in place which cover topics such as planning, implementation and operation, checking, management review and management of change. These policies highlight our commitment to social responsibility and workplace rights concerning our global workforce.

Numerous additional guidelines cover many safety and security issues, such as fire and explosion precautions, the handling of hazardous substances, and the identification of risks associated with chemical production. Further, we have adopted the Precautionary Principle when dealing with risks where scientific understanding is incomplete. We have recently transitioned from OSHAS 18001 certification to ISO4500. A gap analysis was conducted to identify improvement potential for our occupational health and safety management system, actions were defined and implemented, and training rolled out across the group. The new standard will apply to all employees and contractors where we control the workplace. For workplaces that we do not control, the management system only applies to our employees.

GRI 403-2 Hazard identification, risk assessment, and incident investigation

We have established, implemented, and maintain procedures to monitor and measure SHE performance on a regular basis, including the key characteristics of its operations that can have a significant environmental impact. These procedures provide both qualitative and quantitative measures, appropriate to the needs of the organization; monitoring of the extent to which the organization's SHE objectives and targets are met; monitoring the effectiveness of controls (for health and the environment as well as for safety); proactive measures of performance that monitor conformance with the SHE programme(s), controls and operational criteria; reactive measures of performance that monitor ill health, incidents (including accidents, near-misses, etc.), and other historical evidence of deficient SHE performance; recording of data and results of monitoring and measurement sufficient to facilitate subsequent corrective action and preventive action analysis.

Further, our internal guidance, activities, and audits from local SHE departments helps to avoid work-related injuries and illness and regulates the identification of health hazards for the workplace.

403-3 Occupational health services

At Croda, we promote health and well-being globally but responsibility rests with local SHE teams who provide programmes tailored to each site. We go further than legal requirements to encompass the total wellbeing of our people and we are continuing to invest in wellbeing initiatives. First and foremost, this is the right thing to do, but it also makes good business sense; when employees and contractors are safe and healthy, absence is reduced and potential loss of reputation due to serious breaches in policy or regulation are eliminated.

We also offer our employees free counselling by external specialists in the event of stress, fatigue, personal crisis, substance abuse, or other challenging circumstances. Additionally, flexible working arrangements can be made and apply to both work-related stress management and unrelated, extenuating circumstances. We perform assessments of health habits and special health needs of all employees and local teams update their programmes based on any findings.

GRI 403-4 Worker participation, consultation, and communication on occupational health and safety

The reporting of incidents is actively encouraged across all areas of the business and is the responsibility of the SHE Manager in each of our operations. All significant incidents and near misses are investigated by SHE officers across the group, with the ultimate management of such reviews resting with our Group Executive Committee, which receive a quarterly report through the SHE Steering Committee. In addition to this, our risk management procedure ensures that all our regional boards review potential health and safety risks at least twice per year.

Health and safety committees operate at each of our manufacturing sites and offices with representation from all employee levels on each site. Formal consultation is a requirement laid down in our Group Safety Health & Environment Manual, and there is a requirement for regular meetings to take place at each of our manufacturing sites and offices. Each of our operations is required to refresh its safety awareness and behavioural safety programmes regularly.

As such, all Croda employees worldwide should be represented on a joint management and labour health and safety committee.

403-5 Worker training on occupational health and safety

All our employees are required to complete a minimum of three mandatory health and safety training courses delivered via our online training and performance management platform, My Croda. However, due to current reporting restrictions we are unable to report precise figures. Though we aim to do this in future reports.

403-6 Promotion of worker health

We believe that a good work-life balance contributes notably to the well-being of our employees, and we seek to foster a shared culture of health and well-being. To support this effort, we offer a range of flexible working arrangements, such as working from home, agile-working, part-time work, mobile working and flexitime. Additional benefits intended to improve the work-life balance of employees include free healthy meals, facilities for the provision of fitness activities and access to a registered nurse practitioner.

Read more: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

Management Approach: Responsible Business

GRI 103-1 Explanation of the material topic and its boundary

Basis for materiality

Our overall commitment is to uphold the principles of socially responsible business practices and respect the interests of everyone affected by its activities and actions, including our employees, customers, suppliers, shareholders, and the general community at large.

Contribution to value creation

Our commitment to operating our business and conducting our relationships with third parties in a responsible, transparent, and ethical way is embedded in our culture and applies across the entire Croda family this adds value as we are viewed as a reputable business that can be trusted.

Boundary

It is our policy to always conduct our business and throughout the world with honesty and integrity and we operate a range of policies covering all areas of our business. The company believes that all its stakeholders wish to be associated with an ethical organisation which publicises and upholds high standards in all that it does.

We seek to meet and extend the requirements of the UK Bribery Act worldwide, and to this end we have a global Anti-Bribery and Corruption Programme that is overseen by our Group Ethics Committee, which consists of members of our Executive team. Reporting regularly to the Board, the Committee promotes the importance of ethics and compliance throughout our business and is implemented through our global ethics network of colleagues from our finance and legal operations.

GRI 103-2 The management approach and its components

Responsibilities and resources

Many tools and mechanisms are in place to support the Programme, including online gift registers, whistleblowing hotlines, which have recently been expanded to include external third parties, and an anti-bribery and corruption near miss reporting tool. Online training is further complemented with face-to-face workshops for managers and those employees whose roles might expose them to higher ethical risks. In addition, our Anti-bribery and Corruption programme considers the compliance risk associated with every third-party vendor we engage. Our ethics network also meets with all third parties who interact with government agencies on our behalf, to ensure that they understand, and have policies in place to meet, our compliance requirements.

GRI 103-3 Evaluation of the management approach and measurement

Evaluation and outcome

Our ethical agenda and commitment are supported by a planned programme of colleague communications throughout the year, with regional and global management also setting the tone as they visit our locations globally. Our annual internal audit programme has a dedicated governance

section, with certain operations considered higher risk also benefitting from a peer-review by a member of the ethics network.

GENERAL DISCLOSURES

Organisational Profile

GRI 102-1 Name of the organisation

Croda International Plc.

GRI 102-2 Activities, brands, products and services

We are the name behind the high-performance ingredients and technologies in some of the biggest, most successful brands in the world; creating, making, and selling speciality chemicals that are relied on by industries and consumers everywhere.

Established in 1925, we are driven by a focus on our customers, collaborative working, a proactive attitude and the ability to think differently. We encourage our people to work as a unified global team and alongside our customers to find new and sustainable ways to satisfy unmet needs. This means 6,135 passionate employees in manufacturing sites, laboratories and offices worldwide with a shared Purpose: using Smart science to improve lives™.

We have four market sectors: Personal Care, Life Sciences, Performance Technologies, and Industrial Chemicals. Within these sectors, we have nine business areas, each working in partnership with our customers to design ingredients that are manufactured globally and sold directly to our customers.

As a business-to-business organisation we strive to maintain an awareness and conformance, where appropriate, to national and local laws and voluntary codes or guidelines from entities such as the Food and Drug Administration (FDA), the European Food Safety Authority (EFSA), the European Commission, Cosmetics Europe, United States Environmental Protection Agency and Personal Care Products Council (formerly CTFA).

We were a signatory to the chemical industry's voluntary agreement on the accelerated phase out of the supply and use of products for applications restricted under the EU Marketing and Use

Directive, which is now incorporated into our activities under the legislation of Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH). We therefore focus our sales and marketing on offering alternatives with just small amounts being imported for merchanting purposes into allowed uses. For example, manufacturing of alkyl phenol ethoxylates in our European operations is restricted and we are actively developing and promoting alternatives to alkyl phenol ethoxylates in other regions. As a result, many customers have already moved to different products.

GRI 102-3 Location of headquarters

Our corporate headquarters are located at Cowick Hall in East Yorkshire, England.

GRI 102-4 Location of operations

We are a global organisation with 6,135 employees across 37 countries*. The strength of our research, development and manufacturing capabilities is underpinned by our global network of sales offices and technical/customer support teams.

This report covers the sustainability performance of Croda International Plc for the period 1st January 2021 to 31st December 2021. The scope of this report is all wholly owned operations, plus those operations where we have significant management influence due to a majority shareholding. Unless otherwise stated, data provided throughout this report is for continuing operations.

Countries of Operation*				
Western Europe	Eastern Europe, Middle East & Africa (EEMEA)	North America	Latin America	Asia Pacific
Denmark	Poland	Canada	Argentina	Australia
France ^{^^^}	Russia	USA ^{^^}	Brazil [^]	China [^]
Finland	South Africa		Chile	India [^]
Germany	United Arab Emirates		Colombia	Indonesia [^]
Italy [^]	Iran		Mexico	Japan [^]
The Netherlands ^{^^}	Kenya		Peru	Malaysia
Spain [^]	Tunisia			Singapore [^]
Sweden	Poland			South Korea
United Kingdom ^{†^^^^}	Turkey			Thailand
	Ethiopia			Vietnam
	Ghana			

Key: † Head Office

[^] Manufacturing site

*As of 31 December 2021

GRI 102-5 Ownership and legal form

Croda International Plc. is a Public Limited Company; we have been listed on the London Stock Exchange since 1964.

Our ownership structure and major shareholders can be found in our Annual Report.

GRI 102-6 Markets served

The markets served by our business can be found under disclosure GRI 102-2. The revenue generated during 2021, organized by sector is detailed below:

2021 generated revenue (£m)	
Europe, Middle East & Africa	825.3
North America	493.2
Latin America	154.3
Asia	416.8
Total	1,889.6

Further, the breakdown of revenue and operating profit during 2021, separated by market sector, was as follows:

Market sector breakdown	Revenue (£m)	Profit (£m)
Consumer Care	763	188.5
Life Sciences	572.3	208.5
Performance Technologies	439.5	64.5
Industrial Chemicals	114.8	7.1
Total	1,889.6	468.6

GRI 102-7 Scale of the organisation

As of 31st December 2021, the Group employs 6,135 employees worldwide, with 96 premises in 37 countries, including 19 manufacturing sites, our revenue for continuing operations was £1,889.6m. As of 31 December 2021, total debt was £823.2m and £1,765.9m equity. These figures apply to Croda International Plc. in its entirety.

GRI 102-8 Information on employees and other workers

Like all successful businesses, we recognise that our future depends on our ability to attract and retain individuals who are passionate about personal and business growth and want to make a significant contribution to the future of our business. The following information relates to workers who are employees of Croda and is extracted from our internal HR management system.

2021	Full Time	Part Time	Permanent	Temporary
Male (%)	65	17	63	58
Female (%)	35	83	37	42

2021	Western Europe	EEMEA*	Asia Pacific	North America	Latin America
Male (%)	62	46	68	68	51
Female (%)	38	54	32	32	49

Most of our business is completed by employees of the business, who are therefore not self-employed or contractors. Our employee numbers do not fluctuate significantly throughout the year due to seasonal variations. For those employees on a temporary contact, many within this group are undergraduate interns or apprentices to whom permanent employment is normally offered upon successful completion of a training period.

* Eastern Europe, Middle East, and Africa

GRI 102-9 Supply chain

There is a total of 19 manufacturing sites located in Europe, North America, South America and Asia. Each site/region has its own procurement teams responsible for all aspects of procurement associated with acquiring all goods and services. Specific responsibilities include identification of requirements, specifications, assessment of risks, management of tendering processes, ordering, contract award and management and monitoring of suppliers' performance. There are sales offices and warehousing in 38 different countries. Sales offices source materials from the worldwide network of manufacturing sites for customers in their local markets. The global supply chain is supported by a common SAP-based ERP process.

GRI 102-10 Significant changes to the organisation and its supply chain

During 2021, the Group acquired Alban Muller, a leader in the creation and supply of natural and botanical ingredients for the global beauty industry, and in June 2021 our wholly owned Iberchem subsidiary successfully completed the acquisition of Parfex S.A., a fine fragrance business based in Grasse, France.

These acquisitions, alongside Iberchem and Avanti in 2020, all represent strong alignment to our objective of transitioning to a dedicated Life Sciences and Consumer Care company. There have been no substantive changes in location of and relationships with suppliers in 2021. However, European chemicals raw material production is continuing to migrate to other regions offering the twin benefits of lower cost production allied with fast-growing consumer markets. To uphold the security of supply of raw materials, European sites increasingly must look further afield for reliable sources of chemical feedstocks.

GRI 102-11 Precautionary principle or approach

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. The Audit Committee assists the Board in monitoring the effectiveness of the risk management and internal control policies, procedures, and systems. 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, 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.

A cross functional team reviews and refreshes 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.

GRI 102-12 External initiatives

Our proactive approach to working with many external organisations, both inside and outside of our industry, saw us contributing to more than 200 different bodies during 2021. Many of these relate to product, personal and process safety, and regulatory affairs.

Charters

Responsible Care®

We are signatories to Responsible Care®, which is the chemical industry's global voluntary initiative through which companies, through their national associations, work together to continuously improve their health, safety and environmental performance and to communicate with stakeholders about their products and processes. The Responsible Care® ethic helps industries to operate safely, profitably and with due care for future generations. It was commended by UNEP as making a significant contribution to sustainable development at the World Summit on Sustainable Development in 2002.



Round Table on Sustainable Palm Oil (RSPO)

We have been active members of the RSPO since it was established in 2004 and sit on the derivatives working group. The mission of the RSPO is to advance the production, procurement and use of sustainable oil palm products through the development, implementation and verification of credible global standards and the engagement of stakeholders along the supply chain. We are members of the RSPO, which collectively brings oil palm growers, oil processors, food companies, retailers, NGOs, and investors to work together towards a global supply of palm oil that is produced in a socially and environmentally responsible way. The RSPO promotes palm oil production practices that help reduce deforestation, preserve biodiversity, and respect the livelihoods of rural communities in oil-producing countries. It ensures that no new primary forest or other high conservation value areas are sacrificed for palm oil plantations, that plantations apply accepted best practices and that the basic rights and living conditions of millions of plantation workers, smallholders and indigenous people are fully respected.

12 Principles of Green Chemistry

The 12 Principles of Green Chemistry were developed in 1991 by Paul Anastas and John. C. Warner. The aim of the principles is to minimise the environmental impact of chemical products and reduce the environmental and social risks of these products. We have been using these principles since 2010 to ensure that our new product development follows a more sustainable and environmentally friendly path.

GRI 102-13 Memberships of associations

We are a signatory to the Responsible Care® Initiative of the chemical industry trade associations in the UK, USA, and Singapore, and more recently have endorsed the global charter agreed amongst the members of the International Council of Chemical Associations. We have also demonstrated our commitment to sustainable development by endorsing the principles developed in cooperation with stakeholders and member companies of the Chemical Industries Association.

In addition to this, we are also members of over 200 industry associations.

Strategy

GRI 102-14 Statement from senior decision-maker

Chair's Statement

After what has continued to be another challenging year for businesses around the world, I am pleased to report that we have delivered a record performance. This reflects strong growth in our existing business, significant benefits from recent acquisitions and our Health Care business performing exceptionally well. Our team has met the demands of a rapid global recovery, combined with ongoing challenges presented by COVID-19. Customer demand and cost inflation have been at levels we have not seen for a decade; at the same time COVID-19 restrictions have remained in place in many countries around the world. This has presented many challenges for our people, carefully managing both employee wellbeing and customer expectations. As always, our clarity of Purpose has been our guide, ensuring we deliver for our customers, whilst always looking after our business partners and one another. Our success is made possible by our people, who have risen to the challenges the year has presented. Their hard work, dedication and customer focus have been exceptional, and I want to thank all our employees for their contribution to a successful year.

A Purpose-driven company

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

Sustainability as a strategic priority

In line with our Purpose, we have made a bold Commitment to be the world's most sustainable supplier of innovative ingredients. Our focus is now on execution, working with our suppliers and customers to ensure we are Climate, Land and People Positive by 2030. Only by working in partnership can we achieve our goals, and we recognise that the strength of our relationships with others helps drive our success and our positive impact on the world around us. During 2021, our communities also benefited from our longstanding volunteering programme and educational outreach. In addition, we established the Croda Foundation, which is already helping over 50 million people by supporting vaccine infrastructure projects globally, extending the positive impact we are making. Sustainability has been a strategic priority for us over more than a decade, influencing how we develop our business and product portfolio and our priorities for investment. Climate change, biodiversity loss and rising inequality are now changing consumer demands, making sustainability as important to consumer choice as performance. This is providing us with opportunities to leverage our leadership position in sustainability, to help our customers meet these changing consumer needs. Board members engage regularly with our Sustainability Committee to track progress and were represented at the Executive review of our sustainability strategy in October.

When reviewing progress, I am particularly struck by the level of our employees' engagement around this topic and the ownership across throughout the business which will ensure we continue to achieve our goals.

A culture where we put people first

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

In 2021 we implemented an eight-point plan to support the wellbeing of our employees facing the combined challenges of COVID-19 and a rapid recovery in demand. The wellbeing and engagement of all employees is a cornerstone of our success, and I am delighted that we have been able to adopt the Living Wage in 2021 for all employees. Employee share ownership remains at

impressive levels, at over 80% in the UK and 60% internationally. We have augmented this with a new 'Free Share Plan', under which employees who do not participate in other bonus schemes were awarded ten shares in 2021 and will continue to receive free shares when those schemes pay out.

Promoting executive and workforce diversity

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

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

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

Evolved Board composition to reflect our ambition

This commitment to diversity applies to the makeup of the Board, ensuring it is well equipped to lead the business effectively, embraces new ideas and makes good use of differences in experiences, backgrounds, and perspectives to satisfy all the different stakeholders we have as a global organisation. In September 2021, Julie Kim was appointed as a Non-Executive Director (NED), bringing 25 years' experience of health care markets across Europe, Asia and Latin America. Julie is President of Plasma-Derived Therapies at Takeda Pharmaceuticals, a global, R&D driven biopharmaceuticals company. In early 2022, we welcomed Nawal Ouzren, CEO of biopharmaceutical company Sensorion, to the Board as a NED, adding further health care expertise

through her first-hand experience of biologics and novel gene therapies. Both appointments add relevant experience as we look to access higher growth markets in health care, and in regions beyond Europe and North America, such as Asia. They also bring even greater diversity to the Board in terms of gender, ethnicity, nationality and tenure. Overall, I am pleased to have fulfilled our commitment to meeting the requirements of the Parker Review on ethnic diversity and to achieving full gender balance on the Board. I am confident that the diversity of thought and experience we have around the boardroom table will ensure we are able to provide effective support and guidance as we continue to focus on the fast-growth markets of the future.

Despite the challenges presented by COVID-19, as a Board we have been able to continue our programme of engagement with employees across the business, including virtual 'visits' to Avanti and Iberchem, the businesses that we acquired in 2020. I would like to thank all Board members for their support and hard work throughout 2021.

Accelerated strategic progress in a transformational year

Our agile approach and resilient business model have allowed us to look beyond the immediate COVID-19 pandemic, with the Board and Executive Committee working together on our strategy driving sustainability and innovation to deliver growth. In December 2021, we announced the sale of most of our Performance Technologies and Industrial Chemicals businesses to Cargill, the largest private company in the United States. This divestment, due to complete in Summer 2022, will progress our transition to a pure-play consumer and life sciences company, markets where we can deliver on our Purpose of using Smart science to improve lives™. This focus on Consumer Care and Life Sciences will enable us to deliver consistent sales growth and an even stronger profit margin. We committed to communicating openly with the employees of our Performance Technologies and Industrial Chemicals businesses during the strategic review, recognising that it was a period of uncertainty. Cargill is a company with a distinguished history, and I am confident that our employees can look forward to a bright future under its ownership.

Committed to generating value for all stakeholders

The divestment will allow us to focus our resources on delivering sustainable solutions and scaling our consumer, health and crop care technologies. We have a clear capital allocation policy, with a focus on organic investment, given the exciting growth opportunities we see in the future in these markets. We will also provide regular returns to shareholders, invest in complementary acquisitions, and retain our balance sheet strength. The Board is proposing a full year dividend for 2021 of 100

pence per share, representing growth of 10% over 2020, a year in which we were one of the few companies to continue to increase the dividend as we managed the impact of COVID-19. 2021 has been an excellent year for us in which we have delivered a record financial performance and strong progress against our non-financial targets. We are becoming dedicated to consumer and life science markets, where our leadership in sustainability and innovation will deliver further profitable growth. With our clear Purpose, strong culture and committed workforce, we look forward to the future with confidence.

Anita Frew

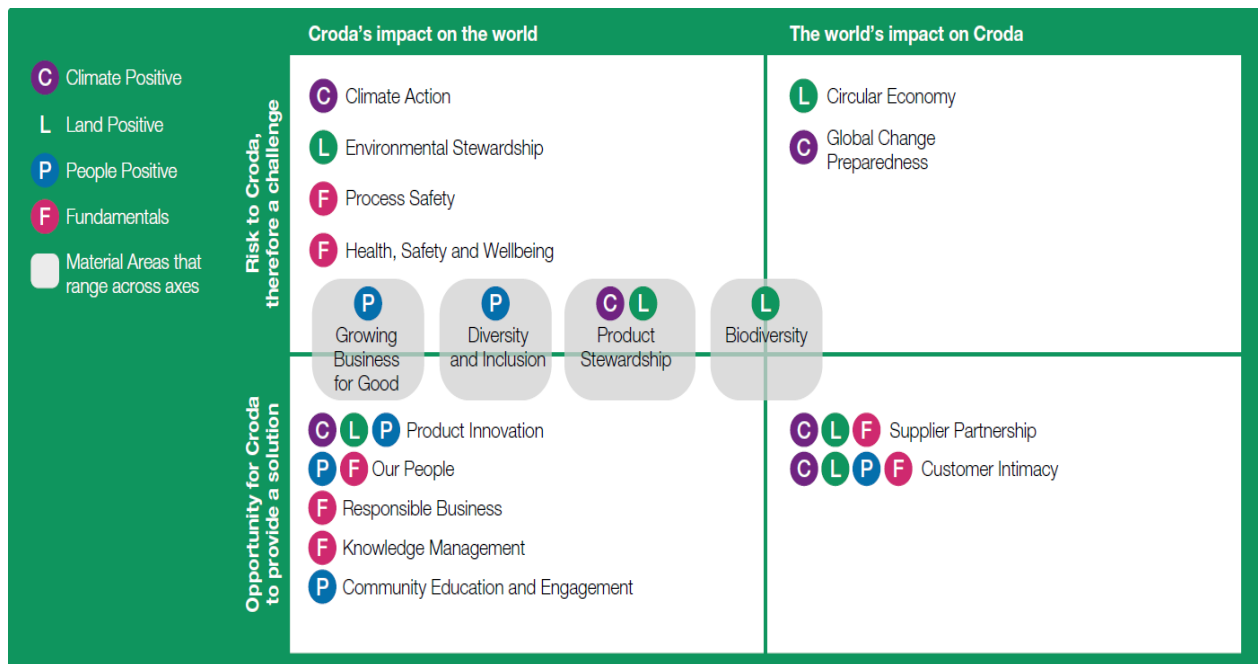
Chair

GRI 102-15 Key impacts, risks, and opportunities

To continuously improve we must establish clear commitments and performance targets aligned to our material areas and their longer-term objectives. In our journey to become Climate, Land and People Positive by 2030, we want to ensure our corporate strategy is aligned with the demands and expectations of stakeholders, and it develops in the right direction given the backdrop of rapidly changing environmental and societal requirements on business. A Group materiality assessment allowed us to fine-tune our understanding of the sustainability issues and opportunities most material to our key stakeholder groups, and therefore most strategic for our business. Recurring themes from this stakeholder engagement include Climate Action, Responsible Business, Environmental Stewardship, Supplier Partnership, Customer Intimacy; and wider collaboration to understand and address the interconnected nature of issues. This exercise confirmed that our 2030 strategy and objectives resonate strongly with our stakeholders' vision. The overwhelming message was a clear recognition of the progress we have made on sustainability, our solid disclosures, and commitment to transparency. Targets have been set with our Group Executive Committee that support our sustainability strategy and ensure that progress is made in addressing our material areas.

We have mapped our material areas according to their most likely source and outcome, and where they intersect with our sustainability strategy to be Climate, Land and People Positive by 2030.

Materiality review



In addition to our materiality analysis and to help us better understand the potential impact of climate change on our business and to inform our future strategy and planning, we have conducted a TCFD aligned quantitative climate scenario analysis looking at both transition and physical risks across three different scenarios, between a 1.5°C net zero 2050 orderly scenario, up to a hot house world +3°C scenario. More details of this work can be found in our 2021 Sustainability and Annual Reports available here: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

<https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

Please also refer to our 2021 Sustainability Report for a summary of our performance against targets related to key risks and opportunities.

Ethics and Integrity

GRI 102-16 Values, principles, standards, and norms of behaviour

In 2005, the Croda Vision was set out as a statement of six values inherent to our business, against which our policies and procedures must be carried out:

- To remain an independent company and operate as one global team.

- We will remain a fun, lively, stimulating, and exciting place to work, where all employees have the courage to question, and all functions and individuals are valued.
- There will be a place for many styles of leadership, but all leaders will have as their primary objective to build other leaders.
- We can only achieve our goals through excellent and constant communication, creativity and setting clear objectives at every level.
- We will continually improve.
- We will continue to be an ethical and responsible company.

Since its inception, the vision has remained unchanged but has become the underlying statement against which all social, economic, and ecological policies and procedures are aligned with. Every new employee is given a copy of the Croda Vision, and group policies are available on our company intranet, SharePoint.

We manage our business across the triple bottom line, as a product or service can only be considered truly sustainable when the demands of economy, environment and society are met. We will continually strive to align our operations with this strategy in the following ways:

- Invest in truly global and profitable innovation to drive long-term growth and business sustainability.
- Continue innovating our products and technology platforms, and responsibly manage our raw materials and supply chains, so that we continue to minimise our environmental impact.
- Set consistent safety and environmental impact standards across our global operations, to provide a safe and healthy working environment.
- Value a diverse, inclusive workforce and provide tailored development opportunities to enable all employees to reach their full potential.
- Ensure fair and equitable employment conditions, providing a stimulating working environment based on respect and partnership.
- Be sensitive toward the communities in which we operate and proactively involve ourselves in local initiatives, with a focus on community education projects relating to the nature of our business.
- Go beyond compliance to work, where relevant, with legislative and industry bodies, as we strive for demanding standards that reduce environmental and social impacts and improve quality.

- Use all available, relevant media to develop open and transparent communication pathways with key stakeholders to help address our material areas.

Each material area in our sustainability programme has a long-term objective and clear management framework detailing strategy, performance management and implementation responsibilities.

We have a Code of Conduct that outlines the high standards to which all our employees are expected to conduct themselves, and a group Code of Ethics that details standards we follow to conduct business in an ethical manner.

We have developed economic performance policies and indicators in areas such as finance, risk management, acquisitions, and disposals with significant issues in these areas are communicated to all employees. Furthermore, the authority to act in any area of economic importance in the group is detailed in a freely available document, which explains at what level of the business specific decisions should be made.

Our environmental performance is monitored and externally audited against the ISO14001 environmental management standard and in 2010 all our global manufacturing sites were certified to this standard. We have also implemented the '12 Principles of Green Chemistry' in each of our research and development centres across the group, and these principles guide the development of new products in such a way that reduces waste, improves efficiency, and ensures that our new products are as sustainable as reasonably practicable.

GRI 102-17 Mechanisms for advice and concerns about ethics

It is always our policy to conduct our business throughout the world with honesty and integrity. In the Croda Vision we have pledged that, "we will continue to be an ethical and responsible company."

In case of uncertainty in interpretation, employees should seek clarification from their line managers. All employees have the right to make confidential reports direct to the Company Secretary of Croda International Plc at Cowick Hall, Snaith, East Yorkshire DN14 9AA, United Kingdom, without fear of detrimental action being taken against them.

Our policy on whistle blowing allows employees to raise concerns with management about the conduct of others that they consider to be in some way damaging to the organisation or others within it.

The company is committed to the implementation of this policy and to a programme of action to ensure that the policy is, and continues to be, fully effective. The overall responsibility for the policy lies with the main Board of Directors, however all staff are expected to comply with the policy and to act in accordance with its objectives to remove any barriers to equal opportunity. Any act of discrimination by employees or any failure to comply with the terms of the policy will result in disciplinary action.

In 2014 we launched Croda SpeakUp which is a group wide independent reporting whistleblowing hotline and website, which further enhanced our whistleblowing policy and procedure. Croda SpeakUp is designed to ensure anonymity, whilst increasing employee comfort and willingness to challenge and report important issues. In North America, the roll out was combined with the additional workplace cultural training across our operations. Please visit www.croda.com/companypolicy to read our group policies.

Governance

GRI 102-18 Governance structure

Our management structure allows us to respond quickly and effectively to individual business challenges and opportunities.

Our two senior decision-making bodies are the Board of Directors, comprising 10 Directors: The Chair; the Group Chief Executive; the Group Finance Director; six independent Non-Executive Directors and one non-independent Non-Executive Director, who was the Company's Chief Technology Officer until his retirement in 2017., and the Group Executive Committee, consisting of our most senior executives including those who sit on the board. These possess a broad range of business, financial and international skills, and experience, providing appropriate balance and diversity.

The board has three main committees:

- Audit Committee
- Nomination Committee
- Remuneration Committee

Our Board and Group Executive Committee also work with our specialist committees of finance, risk management, routine business, and SHE to set economic, environmental and social targets and KPIs. Sustainability plays a holistic role across all committees and our different business functions to ensure that the material areas of our business and key stakeholders are addressed as part of our sustainable business development.

More information about the responsibilities of the board and main committees can be found in our 2021 Annual Report, whilst the Articles of Association are available on our website at:

<https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>
www.croda.com/corporategovernance

GRI 102-19 Delegating authority

The board has ultimate responsibility for our strategy, but delegates authority to an executive level sponsor or senior manager for specialist committees. These sponsors are responsible for localising and implementing strategy and delivering results.

The sponsors report directly to the board, who provide challenge and guidance due to their experience with other businesses and industries. The board also has time built into its agenda programme to review progress against the agreed sustainability targets.

GRI 102-20 Executive level responsibility for economic, environmental, and social topics

Each of our Executive Committee members has responsibility for a region or core function within the business and has established their own regional and business boards.

Our sustainability team, led by our Chief Sustainability Officer, maintain the organisation's focus. The Sustainability Committee, which meets quarterly, has representatives from all functions and sectors who work together to develop and deliver our sustainability strategy and targets, which are then presented to the Executive Committee and board for approval. Once the sustainability targets are agreed and approved, implementation plans are discussed and developed and rolled out across our organisation, with quarterly reports being presented to our Executive Committee.

Our governance structure facilitates the continual evolution of our sustainability strategy and ensures sustainability is at the heart of our business.

Further information about the governance of our Sustainability Committee can be found in our 2021 Sustainability Report: <https://www.croda.com/en-gb/sustainability/non-financial-performance-and-reports>

GRI 102-21 Consulting stakeholders on economic, environmental, and social topics

We recognise the importance of communicating with our stakeholders. The Chairman, Executive Directors and other senior managers maintain regular contact with existing and potential shareholders to ensure our strategy and trading trends are clearly understood. During the year, numerous meetings were held with investors in the UK, USA, Europe and Asia, including face-to-face meetings, telephone and video conferences, and hosted site visits in all these regions. The Chairman, Group Chief Executive and Group Finance Director ensure that shareholders' views are communicated to the entire Board by giving feedback from shareholder meetings and brokers' reports.

Each year we invite all our shareholders to an Annual General Meeting (AGM) to ask questions relating to the agenda of the meeting, which customarily deals with our annual report and accounts, including the report on directors' remuneration. In addition to this, UK company law provides statutory mechanisms for shareholders, requiring directors of companies to hold shareholder meetings and propose resolutions submitted by shareholders.

We believe that effective internal communication is vital to achieving our business objectives and that communication and consultation strengthen the relationship between management and employees. We promote a transparent and open way of working and are committed to developing and improving the effectiveness of any communication and consultation processes.

The appropriate method of communication and/or consultation will be decided by the Company dependent upon the nature of the topic involved. Communication and consultations may take various forms that include, but are not limited to:

Announcements on intranet	Letter
Article in company magazine	Meeting with Union representatives and/or consultative bodies
Employee surveys	Memo
E-list	Notice
E-mail	Questionnaire

Face to face meetings that may be formal or informal	Team briefing and cascades
Focus groups	Team consultations
Group meetings	Telephone calls

More information about our communication with shareholders can be found in our 2021 Annual Report: <https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

GRI 102-22 Governance structure of the highest governance body and its committees

At the date of this report, our Board comprises 10 Directors: The Chair; the Group Chief Executive; the Group Finance Director; six independent Non-Executive Directors and one non-independent Non-Executive Director.

The Board have a range of business, financial and international skills, and experience. They represent the views and demands of all stakeholder groups and give valuable insights into economic, social, and environmental issues due to their roles in other businesses and industries.

During 2021, no independent Non-Executive Director had served on the Board for more than nine years from the date of their first election. During 2021, there were five males on the Board and five females.

Read more: <https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

GRI 102-23 Chair of the highest governance body

Our chairman is a non-executive director. The Chairman was independent on her appointment in 2015 but, as Chairman, is not classified as independent.

Read more: <https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

GRI 102-24 Nominating and selecting the highest governance body

We comply with the provisions of the UK Corporate Governance Code (the "Code") and our board has ultimate responsibility for overall leadership of the company. At the date of this report, The Board

comprises 10 Directors: The Chair; the Group Chief Executive; the Group Finance Director; six independent Non-Executive Directors and one non-independent Non-Executive Director who represent a source of strong independent advice and judgement. The Chairman, Anita Frew, and the senior independent director, Helena Ganczakowski, each have significant commercial experience and the board's understanding of the group's operations is enhanced by regular business presentations and site visits.

The board supports the principles set out in the code regarding board appointments and agrees that having a diverse mix of skills, experience and backgrounds on the board is very important. All members of the board have full access to the Company Secretary for his advice and services. Where necessary, the directors may also take independent professional advice at the company's expense. Directors are granted an indemnity from the company in respect of liabilities incurred because of their positions to the extent permitted by law. In addition, the company-maintained directors', and officers' liability insurance cover throughout the year.

GRI 102-25 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.

Details of the professional commitments of the Chair and the Non-Executive Directors are included in their biographies on pages 62 and 63 of our 2021 Annual Report. The Board is satisfied that these do not interfere or conflict with the performance of their duties for the Company.

Read more: <https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

GRI 102-26 Role of highest governance body in setting purpose, values, and strategy

The board has ultimate responsibility for the overall leadership of the company and in this role, it assists in the development of a clear strategy for the group, monitors operational and financial performance against agreed goals and objectives and ensures that appropriate controls and systems are in place to manage risk.

GRI 102-27 Collective knowledge of highest governance body

Training and briefings are available to all directors on appointment and subsequently, as appropriate, considering their existing experience, qualifications, and skills. Directors receive a tailored induction programme based on their experience as a director of a listed company and knowledge of the industry sector. This includes time with the Company Secretary, members of the Executive Committee and other senior management across the business, meetings with advisers, visits to operations around the group and provision of current and historical information about the company and the group and specific details on duties of directors. To build and increase the non-executive directors' familiarity with, and understanding of, the group's people and businesses and the markets in which it operates, presentations from senior managers are made at board meetings on a regular basis.

In addition to formal board meetings, in 2021, the directors attended virtual meetings to review the group's strategy and were present at the AGM. They also met with the Company's financial and public relations advisers to discuss the feedback from investors and analysts on the Group's annual results. The Chairman and Non-Executive Directors met together without the Executive Directors present.

The Chairman spends a considerable amount of time meeting with Steve Foots and the senior management team at the company's head office. This ensures that she is kept apprised of significant developments in the company between board meetings.

All directors are involved in the group's Leadership Development Programme. This involves attending various sessions and includes discussions on business strategy and leadership chaired by a director, as well as interacting with employee course members in team building sessions or at dinners.

Unfortunately, due to the Covid-19 pandemic the members of the Executive Committee and other senior managers from across the company were unable to attend board dinners where the board would usually discuss topics relevant to the business and its strategy.

GRI 102-28 Evaluating the highest governance body's performance

Remuneration of the executive members of the board includes performance related aspects rewarding contribution to sustained increases in company performance and value. In line with the Association of British Insurers' Guidelines on Responsible Investment Disclosure, the Remuneration Committee ensures that the incentive structure for executive directors and senior executive management will not raise environmental, social or governance (ESG) risks by inadvertently motivating irresponsible

behaviour. The committee also has the discretion to take health, safety and environmental performance into consideration when determining the actual overall level of individual bonus payments and it may reduce the bonus awards if it considers it appropriate to do so.

GRI 102-29 Identifying and managing economic, environmental, and social impacts

Effective management of risks and opportunities is essential to the delivery of the group's financial and non-financial objectives, thereby ensuring that we deliver value to our shareholders, protect our reputation, and continue to meet the requirements of good corporate governance.

The Board of Directors determines our overall risk appetite through a review of internal and external business and stakeholder needs. It also oversees the group's risk management and internal control systems, defines risks, and monitors risk exposures and ensures that the nature and extent of the risks we take align with our strategic objectives.

We are committed to the effective management of all key risks identified and coordinate our global approach through our Risk Management Committee. Chaired by the Group Finance Director and comprising the regional presidents, Group Financial Controller and Company Secretary, with the Vice President – Risk & Control in attendance.

GRI 102-30 Effectiveness of risk management processes

The Board acknowledges its responsibility for ensuring the maintenance of a sound system of internal controls and risk management, in accordance with the guidance set out in the Financial Reporting Council's Guidance on Risk Management, Internal Control and Related Financial Business reporting 2014, and in the Corporate Governance Code itself. Executive management have established an organisational structure with clear operating procedures, lines of responsibility and delegated authority which was reviewed by the Board page 73. There are clear procedures and defined authorities for the following:

Financial reporting and financial statements review

Policies and procedures governing the financial reporting process and preparation of the financial statements are owned by the Group Finance Director and clearly and transparently communicated through the Group Policies system. To assess the financial statements, the Audit Committee regularly

reviews reports from members of the finance team and external audit who are invited to attend the Committee's meetings. When conducting its review, the Committee considers material accounting assumptions and estimates made by management, any significant judgements or key audit matters identified by the external auditor (pages 113 to 114 Auditor report), compliance with relevant accounting standards and other regulatory reporting requirements, including the UK Corporate Governance code, and the accounting policies and procedures applied (see page 80 of our 2021 Annual Report).

<https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

Internal audit function

The internal audit function is a key element of the Group's corporate governance framework. Its role is to provide independent and objective assurance, advice and insight on governance, risk management and internal controls to the Board and Audit Committee and the Group. It supports the Group's strategy and objectives by evaluating and assessing the effectiveness of risk management systems, business policies and procedures, system and key internal controls. In reporting on their reviews, internal audit makes recommendations to address issues and improve processes. Once recommendations are agreed with management, the internal audit function monitors their implementation and reports to the Audit Committee on progress at every meeting.

Capital investment

The Finance Committee (a subcommittee of the Executive Committee) operate a clearly defined capital expenditure process including detailed business plan appraisal, risk analysis and authorisation. The Global Capital Project Director has developed a framework for managing major capital expenditure, and post-investment review processes are completed by internal audit (at the Audit Committee's request).

Business risk management

The Executive/Group has established an ongoing process for identifying, evaluating and managing emerging and principal risks. The Board receives updates on principal risks and risk appetite on an annual basis and the Audit Committee receives reports from internal audit on the effectiveness of mitigating controls in place over selected principal risks at each meeting. The Risk Management

steering group, a subcommittee of the Executive Committee, meets on a quarterly basis to monitor and review both current and emerging risks.

Internal Controls

There is a documented framework of required internal controls for business processes, IT, safety and quality, which form part of our 'business as usual' activities and which are documented in controls manuals. Policies governing the internal controls are documented in the Group Policies system, which is available online to all employees, and each group policy is owned by a member of the Executive Committee. Confirmation that the controls are being adhered to is the responsibility of managers, who together with their teams complete an annual self-assessment process against all controls which provides a snapshot of the control environment at the start of the year. Compliance with controls is tested by the internal audit team as part of their annual plan of work approved by the Audit Committee each year, as well as being tested by other internal assurance providers. The Board discharged its responsibility for monitoring the operational effectiveness of the internal control and risk management systems throughout the year using a process which involved:

- Delegation of review of systems of risk management and internal control to the Audit Committee
- Receipt of written confirmations from senior management
- Board review of the report on significant control weaknesses
- Annual review of risk appetite statements and principal

These processes have been in place for the full financial year up to the date on which the financial statements were approved by the Board. The systems are designed to mitigate, rather than eliminate, the risk of failure to achieve business objectives and provide reasonable, but not absolute, assurance against material misstatement or loss.

GRI 102-31 Review of economic, environmental, and social topics

The Risk Management Committee, chaired by Jez Maiden, meets quarterly to monitor and review risks other than Safety, Health, Environment and Quality (SHEQ), Ethics and Sustainability.

Standing agenda item to monitor business IT systems and cyber risks and currently COVID-19 risk. Covers proactive risk management, risk monitoring and mitigation and internal and external emerging risks, including emerging regulatory requirements. Receives an in-depth presentation of specific key risks and mitigating controls from risk owners at each meeting. Considers the results of internal audit work for all risks.

GRI 102-32 Highest governance body's role in sustainability reporting

The board receive a draft of the Annual Report and Accounts and the Sustainability Report, and each member reviews the documents and provides detailed feedback. They then receive a final copy of the two reports to approve before printing and mailing commences.

GRI 102-33 Communicating critical concerns

Internal audit report grading includes a colour coded score for individual issues and the overall report for the location visited. High risk reports are escalated to the Audit Committee Chairman as they arise, and high-risk issues are escalated to the Executive Committee. All reports are presented to the Audit Committee as they are completed at the quarterly meetings.

GRI 102-36 Process for determining remuneration

The Remuneration Committee approves the annual salaries, incentive arrangements (including setting performance targets and payments/vesting events), service agreements and other employment conditions of the Executive Directors and certain members of the senior executive management team designated by the board. The Committee has delegated responsibility for setting the remuneration of the Chairman.

The committee invites individuals to attend meetings to ensure that decisions are informed and take account of pay and conditions in the wider group.

During 2021, invitees included other Directors and employees of the Group and the Committee's advisers, including Steve Foots (Group Chief Executive), Jez Maiden (Group Finance Director), Tracy Sheedy (Group HR Director) and Tom Brophy (Group General Counsel and Company Secretary).

During 2021 Deloitte LLP have provided remuneration consultancy to the Remuneration Committee. Deloitte LLP also provided overseas tax and legal advisory services and are signatories to the

Remuneration Consultants Group Code of Conduct. The Committee regularly reviews the external adviser relationship and is comfortable that the advice it is receiving remains objective and independent.

GRI 102-37 Stakeholders' involvement in remuneration

The Remuneration Committee considers shareholder feedback received in relation to the AGM each year and guidance from shareholder representative bodies more generally. This feedback, plus any additional feedback received during any meetings held with shareholders from time to time, is then considered as part of the Committee's ongoing review of remuneration policy.

In line with current market practice, we do not actively consult with employees on executive remuneration. We have a diverse workforce operating globally in 38 different countries, with various local pay practices, which hinders effective consultation and so the Group Human Resources Director updates the committee periodically on feedback received on remuneration practices across the Group. The committee takes due account of remuneration structures elsewhere in the Group when setting pay for the Executive Directors (for example, consideration is given to the overall salary increase budget and the incentive structures that operate across the group).

Stakeholder Engagement

GRI 102-40 List of stakeholder groups

We must consider and take necessary action to meet the needs and expectations of our stakeholders. By understanding the sustainability issues that are of greatest concern to them, we can make sure that we focus on the issues that will be most important to the future of our business, and our long-term sustainable growth, through the management of our sustainability programme.

To achieve this, we maintain a culture of open communication with our internal and external stakeholders, regularly holding face to face meetings, hosting webinars, and training sessions, attending events and seeking feedback. Throughout the year we engaged in direct communication with the following stakeholder groups:

Stakeholder Groups	
Community	Investors
Customers & Consumers	Non-Government Organisations
Employees	Suppliers
Governance & Regulatory	

GRI 102-41 Collective bargaining agreements

We ensure our policies are consistent with the spirit and intent of ILO's Declaration on Fundamental Principles and Rights at work, where applicable to business. Our group policy on Trade Union Membership states that Croda International Plc recognises that all its employees have the right to freedom of association. We will not interfere in the legitimate activities of Trades Unions at our sites.

We recognise that every employee has the right to join or remain a member of a Trade Union if they wish to do so. Equally the company recognises that every employee has the right not to join or to leave a Trade Union if they wish to do so. We will not seek to persuade any employee, potential or otherwise, to join or leave any Trade Union or other workers' association. Collective bargaining agreements are managed individually at each manufacturing site between the site and the corresponding unions. As such, the company does not hold a central record of how many employees are covered by such agreements.

GRI 102-42 Identifying and selecting stakeholders

Key stakeholder engagement areas are:

- Working closely with our customers to meet their current and future needs.
- Close interaction with suppliers to deliver high performance sustainable products.
- Regular engagement with our employees on performance, policies and issues relating to meeting personal and business needs.
- Engagement with neighbours close to all our operations and open discussion regarding safety with those who live around our manufacturing sites.
- Ensuring that our investors are satisfied not only with our short-term performance, but also our long-term sustainability strategy and
- A proactive approach to working with many external organisations, both within and outside our industry, to contribute and aid our understanding of the issues affecting the sustainability of our business.

Read more: <https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

<https://www.croda.com/en-gb/sustainability/our-commitment/climate-positive>

GRI 102-43 Approach to stakeholder engagement

In 2021, we conducted an external survey with our stakeholders, which focused on the issues addressed in our sustainability programme. The outcome of the survey was used to determine the relevance and robustness of our Material Areas and informed our updated Materiality Matrix. Please see GRI 102-44 and page 19 of our annual report for more information.

GRI 102-44 Key topics and concerns raised

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.

Some key highlights for 2021 include:

- Our innovation partners - 579 partners compliment internal R&D investments
- Our people – over 100 wellbeing activities held
- Our customers – 3000 customers, across 49 countries, responded to our “Voice of the Customer” programme
- Our suppliers – representing 65% of spend have been assessed by Ecovadis for responsible practices
- Regulators & Trade Associations – >200 active memberships of industry associations

Our 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.

GRI -103 Management Approach: Identified Material Aspects and Boundaries

This report covers the sustainability performance of Croda International Plc for the period 1 January 2021 to 31 December 2021. The scope of this report is all wholly owned operations, plus those operations where we have significant management influence due to a majority shareholding. Unless otherwise stated, data provided throughout this report is for continuing operations.

In March 2021, we acquired natural actives specialist Alban Muller for €25m, expanding our portfolio of natural ingredients in our global leading Beauty Actives business. In June, we completed the acquisition of Parfex for €45m. This acquisition increases Iberchem’s sustainable fragrance offerings and reinforces Iberchem’s superior growth profile with greater access to fine fragrances.

GRI 102-45 Entities included in the consolidated financial statements

We are a global organisation with 6,135 employees across 37 countries. By being close to our customers around the world, we have a collaborative approach to business, which allows us to respond quickly and efficiently to unmet needs.

Our business is split into four reporting market sectors:

Consumer Care: 2021 was a year of significant growth, even compared with pre-pandemic trading, particularly at the premium end of the market which will continue to grow as a proportion of our sales. This year we have added higher growth businesses to the Consumer Care portfolio.

The Home Care business has an impressive growth profile based on sustainable technology platforms. Iberchem, our fragrances and flavours business acquired in November 2020, also has an admirable track record of growth augmented by revenue synergies made possible by our ownership.

Within F&F and across Croda we are well placed to meet the requirements of regional and independent customers, due to a broad portfolio and formulation expertise that accelerates customers' speed to market. We are leveraging this business model by providing total solutions tailored to local needs. We are also leveraging our leadership position in sustainability, built on our heritage of using renewable raw materials and significant investment over more than a decade. This sustainability leadership is now bringing clear commercial benefits. In addition, our ingredients deliver proven efficacy underpinned by science and innovation. We will deliver higher and more consistent growth as the leading sustainable and science-driven solution provider in consumer care markets.

Life Sciences: The Life Sciences team had a successful year, in which we have truly lived Croda's Purpose to use Smart science to improve lives™ and, at the same time, captured value in the fast-growing markets we supported. In Health Care, we have strengthened our capabilities in drug delivery technologies. Our role in the fast development and supply of lipid systems for the mRNA vaccines is an example of our innovation and flexibility in action. We also stepped up our research into novel vaccine adjuvants and continue to work closely with our partners to target next generation vaccines, many for target diseases which do not have effective immunisation programmes today.

In Crop Care, most of our investment has been focused on building technology platforms with an improved biodegradability and carbon footprint – a clear commitment

to our partners' sustainability roadmaps. An example is our microplastic-free range of seed coatings which have seen uptake across both field crop and vegetable applications this year.

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

Performance Technologies: Performance Technologies continued to strengthen throughout 2021. Sales growth reflected increased demand across automotive, packaging and industrial end markets. Margin also improved through improved product mix and the benefit of increased volume on operating leverage within the sector. Smart Materials delivered strong sales across its broad range

of application markets, including markets which benefitted during COVID lockdowns, such as packaging. 2021 also saw a rapid recovery in Energy Technologies markets. Significant raw material cost inflation was fully recovered through selling prices. Sales grew by 18% in reported terms to £439.5m (2020: £373.6m). Underlying sales were 24% higher, partly offset by adverse currency translation of 6%. Within underlying growth, price/mix was 11% higher, reflecting recovery of raw material cost increases and greater contribution from higher value products, with volume 13% higher as sales recovered post-pandemic.

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

Industrial Chemicals: Industrial Chemicals has continued to support the overall performance of Croda's three principal sectors. After a period of lower sales reflecting re-engineering of several products and processes to reduce the volume of by-products produced, which have then traditionally been sold by this sector, the product portfolio was stable and sales grew with the upsurge in global industrial demand, together with robust pricing management. Sales grew by 19% in reported terms to £114.8m (2020: £96.4m). Underlying sales were 25% higher, partly offset by adverse currency translation of 6%. Within underlying growth, price/mix was 15% higher, reflecting higher commodity prices, with volume 10% higher. IFRS operating profit increased to £6.5m (2020: £0.6m loss). Adjusted operating profit increased to £7.1m (2020: £0.3m loss). Return on sales increased to 6.2% reflecting the benefit of operating leverage, improved product mix and higher commodity prices.

GRI 102-46 Defining report content and topic boundaries

Our sustainability programme is guided by the three global drivers that we consider to be the most important to the future of our business:

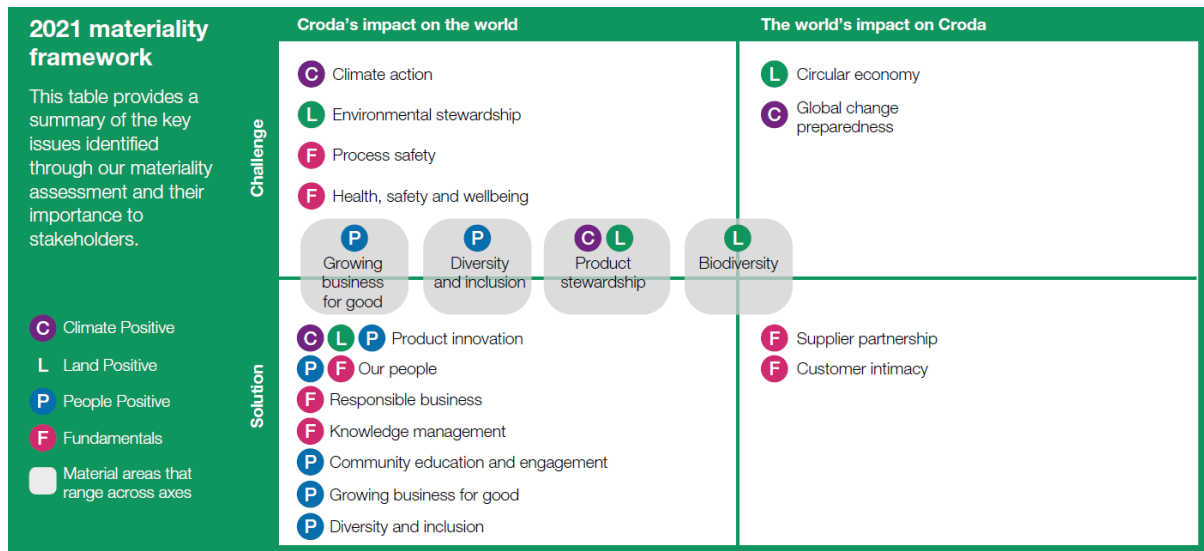
1. Sustainability
2. Emerging markets
3. Digitalisation and interconnectedness

As the impact of such global drivers changes the world around us, our sustainability programme must continue to evolve to meet the needs of our stakeholders, especially our customers and their consumers. We review our materiality annually and in 2021 we conducted a full materiality assessment during, concluding the fourth materiality assessment triennial cycle that started in 2012. This was our most comprehensive to date, with more data sources, direct contact with stakeholders and detailed analysis than ever before. Given the accelerating nature of the global sustainability agenda it was vital to 'take the temperature' of stakeholder expectations in 2021. A full report on the materiality assessment can be found in our 2021 Sustainability Report; the outcome of the assessment reconfirmed we are focusing on the right topics for most stakeholders, while we saw nature/biodiversity and global health preparedness increasing in importance since our last assessment in 2018.

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

GRI 102-47 List of material topics

As a result of the annual review of our sustainability programme, the below aspects were considered material:



GRI 102-48 Restatements of information

There are no restatements to report.

GRI 102-49 Changes in reporting

We have recently launched an ambitious set of 2030 targets. Our performance against targets and future targets can be found throughout the 2021 Sustainability Report.

Report Profile

GRI 102-50 Reporting period

This report covers the performance of the Croda Group for the period 1 January 2021 to 31 December 2021.

The reporting of some objectives and targets may cover a wider period; this will be made clear where relevant.

GRI 102-51 Date of most recent report

We have been reporting to GRI since 2008 and this report is our 14th GRI Report. We publish our report annually during the second quarter of the year. Our previous GRI reports can be downloaded

from our online GRI report archive whilst our Sustainability Reports are also available at <https://www.croda.com/en-gb/sustainability/our-commitment/climate-positive>

GRI 102-52 Reporting cycle

We follow an annual reporting cycle; our printed Sustainability Report (formerly CSR Report up to 2010) is published in March each year and released in conjunction with our Annual Report. Our GRI report is released exclusively online at www.croda.com/GRI.

GRI 102-53 Contact point for questions regarding the report

Should you have any questions regarding our GRI Report, or its contents then please do not hesitate to contact our Group Sustainability Team via sustainability@croda.com.

GRI 102-54 Claims of reporting in accordance with GRI standards

This report has been prepared in accordance with the GRI Standards: Core option.

GRI 102-56 External Assurance

The financial information contained in the Annual Report has been externally audited by KPMG LLP Statutory Auditors, detailed in a statement which can be found in our 2021 Annual Report.

Along with this process, the financial and non-financial information in the directors' report, including the sustainability section, has been reviewed for inconsistencies with the audited financial statements.

In 2021, our reported scope 1,2 and 3 GHG emissions received reasonable verification by Avieco in accordance with the requirements of the ISO 14064-3 standard. The verification covers our stated historic emissions for one reporting year – the 12 months starting 1st January 2021 and ending 31st December 2021.

Economic Performance

GRI 103 – Economic Performance Management Approach

Economic Performance

At Croda our Purpose is to use Smart science to improve lives™, enabled by our distinctive values-led culture that governs how we work with one another and guides our relationships with all our partners.

We combine our knowledge, passion, and entrepreneurial spirit to create, make and sell speciality ingredients that are relied on by industries and consumers everywhere.

Our corporate strategy sets out the high-level themes that will help us to deliver our Purpose. A focus on growth, innovation and sustainability means that our smart science can help our customers to deliver both their consumer and sustainability commitments, while we achieve our own, creating sustainable value for our shareholders.

Our market focus targets Consumer Care, Life Sciences, Performance Technologies and Industrial Chemicals as we look to extend the reach of our smart science to consumers everywhere. From sun protection to pharmaceuticals, crop and battery technologies, these markets touch our lives every day.

To maximise opportunities for growth, we use the global mega trends to shape our strategy and business model, which ensures we can deliver innovations that satisfy the unmet needs of our customers:

- Sustainability
- Emerging markets
- Digitalisation and interconnectedness

These megatrends will impact right across our four business sectors, and continued innovation coupled with our ongoing focus on naturally sourced raw materials will leave us well placed to take advantage of them.

The delivery of our ambitious goals will be enabled by our three key strategic objectives: delivering growth, driving innovation and sustainable solutions.

For further details on our economic performance see our 2021 Annual Report.

Procurement Practices

Renewable, naturally sourced raw materials are at the heart of Croda. Our very first product in 1925 was Lanolin, which is obtained because of washing sheep fleece for the wool industry, making it a very natural and sustainable ingredient. 90 years later, we are still working closely with wool producers to improve the efficiency of Lanolin extraction.

Our global procurement team harbour strong, long-lasting relationships with our suppliers through a culture of open communication. Our recently updated Supplier Code of Conduct is actively managed during face-to-face meetings with our suppliers and often has its own place on the agenda to be discussed.

We utilise a system called SAP to track and monitor all raw material purchasing. All our sites globally oversee their purchasing budgets, and it is their policy to source locally where possible.

GRI 201-1 Direct economic value generated and distributed

In 2021, turnover from continuing operations was £1889.6m (2020: £1390.3m) and operating profit was £411.5m(2020: £319.6m), a return on sales of 24.8% (2020: 23%).

Adjusted pre-tax profit from continuing operations increased by 48% to £445.2m (2020: £300.6m). Earnings per share increased by 43% to 250.5p (2019: 175.5p).

Further details on our economic value can be found throughout the 2021 Annual Report. An overview can be found on page 1, whilst the group's financial statements can be found on pages 112-167.

GRI 201-2 Financial implications and other risks and opportunities due to climate change

In 2021 we adopted TCFD guidance to report our climate related risks and opportunities, please refer to pages 40-43 of our 2021 Annual Report.

<https://www.croda.com/en-gb/investors/results-presentations-and-reports/annual-report>

GRI 201-3 Defined benefit plan obligations and other retirement plans

Partial Reporting

Pension provision forms part of our total employment package, which is aligned to the needs of our employees and the markets in which we operate. We actively encourage employees to join our company pension schemes where available, but we realise that this is a personal choice.

Defined benefits plan coverage	
Number of employees covered by defined benefit Schemes	1,710*
Expressed as a percentage of Group	28%

*Please note that this figure only includes employees in active pension schemes and does not include locations that have a private pension plan.

GRI 201-4 Financial assistance received from government

During the year, no significant financial assistance was received from governments, and we have no governmental shareholders.

Procurement Practices – management approach

Renewable, naturally sourced raw materials are at the heart of Croda. Our very first product in 1925 was lanolin, which is created by washing sheep fleece for the wool industry, making it a very natural and sustainable ingredient. 94 years later, we are still working closely with wool producers to improve the efficiency of lanolin extraction and in 2021 69% of our organic origin raw materials were bio-based coming from renewable crops and biotechnology.

Our global procurement team harbour strong, long-lasting relationships with our suppliers through a culture of open communication and we have partnered with EcoVadis as our framework for sustainability monitoring, using their universal scorecard, benchmarks, and performance improvement tools.

We have a publicly stated target to ensure all our key suppliers are responding to EcoVadis and engaging with us to improve practices and by the end of 2021 suppliers representing 65% of our spend have been evaluated.

We developed and published our new Supplier Code of Conduct during 2021, which clearly states our sustainability objectives and fundamental requirements of doing business. It requires

acknowledgement and acceptance from all suppliers and is an important tool to develop dialogue with like-minded suppliers who are also making commitments to science-based targets and the SDGs.

GRI 204-1 Proportion of spending on local suppliers

Partial reporting

Where goods and services of the right cost and quality can be purchased by manufacturing plants in their own country from local suppliers operating in the same country, then the sites will preferentially do this. The extent to which local sourcing is practiced across all the manufacturing sites is not currently measured.

Anti-corruption and anti-competitive behaviour – Management approach

Responsible and ethical behaviour is fundamental to the way we operate. Through Our Purpose, we have set out to create a positive difference to the environment and to society. We will only achieve Our Commitment by striving to do better in all that we do. Our Code of Conduct sets out the standards that we will work to, our expectations of each other, and confirms everyone's responsibility to speak-up and report suspected or actual breaches of our policies. The Code is aligned with our three guiding values of 'Responsible', 'Innovative' and 'Together', underpinning how we expect every employee to behave: with integrity and in an open and respectful way. In practical terms, the Code provides, general guidance on a range of possible situations, what policies are in place to deal with these situations, and where to go for further guidance. The Code cannot cover every eventuality. If specific situations are not covered, the spirit of the Code must be upheld by exercising common sense, good judgement and asking for further help and guidance.

- Our Code is mandated for all employees:
- Employees (including former and prospective employees), whether full time, part time, fixed term, permanent or temporary
- Interns, students, apprentices, or work experience placements
- Contractors or third-party labour providers where Croda has full control
- Persons who are statutory directors or have equivalent responsibilities
- Employees of joint ventures
- Employees of new acquisitions

We also require all third-party business partners to adhere to business principles that are consistent with our own.

Failure to comply with this Code amounts to a failure to comply with our policies and could have very serious consequences for both us and any individuals concerned. For individuals, these consequences could include disciplinary action, up to and including dismissal without notice. For us, any illegal conduct could lead to significant fines, imprisonment for individuals and significant damage to our reputation.

All our employees are expected to follow this Code, which is available in all the major Croda languages. The full text also appears on the company website. The Board holds our management accountable for compliance.

Competition Law

We comply with competition and anti-trust rules in the countries in which we operate not only because it is the right thing to do but failure to comply with competition rules (sometimes referred to as anti-trust rules) can result in significant fines, financial damages to third parties, legal costs, and damage to our reputation. Criminal sanctions may also apply.

We commit to:

- Ensuring that we operate in a responsible manner, complying with competition rules in each country where we do business
- Ensuring that we provide an appropriate level of competition law training to all colleagues who need it.

Everyone must commit to:

- Completing any competition law training assigned to you
- Complying with competition law and ensuring your actions do not pose a competition law risk to the Group
- Seeking advice from the manager and Croda Counsel in your region if you have any questions or if there is anything that you are unsure about.

Leaders must commit to:

- Setting high expectations for their teams' behaviours and compliance with competition laws

- Providing advice in a timely manner to their teams and seeking further advice from the Croda Counsel where appropriate.

Anti-bribery

We will not tolerate bribery and corruption in any part of our business. A breach of bribery and corruption laws may result prosecution, potentially leading to fines. In addition, any breach can lead to serious damage to our reputation.

We commit to:

- Upholding the highest standards of integrity in our business
- Ensuring that we operate in a responsible manner, complying with anti-bribery rules in each country where we do business
- Ensuring that we provide an appropriate level of anti-bribery training to all those colleagues who need it.

Everyone must commit to:

- Completing any anti-bribery training assigned to you
- Always making it clear, internally, and externally, that we have a zero-tolerance approach to bribery
- Never offering or giving a bribe or improper advantage (including facilitation payments) to any public official, other individual or third party
- Never requesting or accepting bribes or improper advantage from any third party
- Checking that third parties that we work with adhere to the same ethical standards that we do by following the Group ABC procedures
- Using the anti-bribery near miss reporting tool
- Seeking advice from the Croda Counsel in your region if there is anything you are unsure about.

Leaders must commit to:

- Setting high expectations for their teams' behaviours and compliance with relevant bribery and corruption laws
- Providing advice in a timely manner to their teams and seeking further advice from the Croda Counsel, where appropriate

Gifts and hospitality

We will only give and receive gifts and hospitality that are legitimate and proportionate to our business activity. Although hospitality and the giving and receiving of gifts can play a positive role in building relationships with customers, suppliers and other third parties, it can be abused, leading to a breach of bribery and corruption laws or actual or perceived conflicts of interest.

We commit to:

- Providing a register for recording the giving and receiving of gifts and hospitality
- Providing training on gifts and hospitality.

Everyone must commit to:

- Disclosing the giving or receiving of gifts or hospitality (regardless of whether accepted) on the Gift Register in a timely manner
- Never accepting gifts or hospitality if you are involved with an active tendering process, or in the period preceding the award of a contract or a pricing discussion
- Following the pre-approval procedure in the Business Gifts and Hospitality Policy before offering a gift or hospitality to a customer, supplier or other third party.

Leaders must commit to:

- Ensuring everyone in their teams is aware of Croda's policy regarding the giving and receiving of gifts and hospitality and that any mandatory training is completed
- Providing advice in a timely manner to their teams about the giving and receiving of gifts and seeking further advice about any areas of uncertainty.

Conflicts of interest

We expect everyone at Croda to act with integrity and to either avoid or manage, with the agreement of the Company, any actual or perceived conflicts of interest. Conflicts of interest, real

or perceived, can raise doubts about the quality of business decisions and the integrity of persons making these decisions.

We commit to:

- Setting standards to explain what a conflict of interest is and how to manage it
- Providing training for all employees to be able to recognise a potential conflict of interest and know how to manage it.

Everyone must commit to:

- Avoiding any relationship that will impair, or appear to impair, your ability to make decisions in a fair and objective manner and in the interests of Croda. Examples include:
- Working for a competitor, customer or supplier of Croda
- Being part of a recruitment process or directly managing a family member, friend or romantic partner
- Using and/or selecting third party suppliers who include family members, personal friends or a romantic partner
- Promptly reporting any situation that cannot be avoided or already exists to your line manager, with a copy to the regional Croda legal representative, and submitting a 'Conflict of Interest' report
- Promptly taking whatever action is necessary to remove or mitigate the risk of a conflict of interest.

Leaders must commit to:

- Ensuring that everyone in their team is aware of Croda's policy regarding conflicts of interest and that any mandatory training is completed
- Providing advice in a timely manner to their teams about actual and potential conflicts of interest and seeking further advice about anything that is not clear.

GRI 205-1 Operations assessed for risks related to corruption

Partial Reporting - Identification of organisational risks relating to corruption was undertaken by overlaying the territorial analysis of turnover with the risk corruption index map from a recognised provider ([Transparency International](#)). Territories identified as being at higher risk of corruption and which generated material turnover were discussed in more detail with locally knowledgeable management to identify any specific areas of concern.

GRI 205-2 Communication and training about anti-corruption policies and procedures

Following implementation of the Bribery Act 2010 in 2011, and as part of a wide-ranging compliance review, we instituted a Group wide training programme incorporating issues raised by this legislation.

Employees who are most likely to be exposed to bribery related issues due to their function or location are required to complete online training. The course involves employees being taken through numerous scenarios relevant to our business and it cannot be completed successfully without passing a test.

Anti-competitive Behaviour

GRI 206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes

Throughout the year there were no legal actions initiated under national or international laws against us for the purposes of regulating anti-competitive behaviour, anti-trust, or monopoly practices.

Tax

GRI 207-1 Approach to tax

Our tax strategy is a publicly available document, which sets out the approach to tax that the Group follows, covering the Group Tax Policy and the Group Tax Code of Conduct. It is available to all the Group's stakeholders. The published tax strategy is on our global croda.com website <https://www.croda.com/en-gb/investors/governance/company-policies>

Our tax strategy is reviewed and updated annually by the Group Tax department, approved by the Board of Directors and updated strategy is published on the website.

The Group Tax Policy within the Group Tax Strategy outlines compliance with all relevant tax laws, rules, regulations, and reporting and disclosure requirements, in all the jurisdictions where we operate. The Group Tax Code of Conduct also covers compliance with laws, rules and regulations and our approach to regulatory compliance.

As outlined in the Group Tax Policy (point 2), the Group ensures the tax strategy is always consistent with the Group's overall strategy (which has sustainable development at its core), its approach to risk, and the Group's values.

GRI 207-2 Tax governance, control, and risk management

Point 3 within our Group Tax Code of Conduct covers governance, assurance, and Tax Risk management.

Our Group Financial Controller and Group Financial Director and ultimately the Audit Committee are accountable for compliance with our tax strategy.

Country level tax compliance and adherence to the Group tax strategy is managed by local finance and management teams.

Local and regional Finance Directors implement the group tax policy and are responsible for tax compliance within their regions. Our Group Finance Controller and Group Tax Department provide oversight and support.

Ongoing and emerging tax risks are identified, managed, and monitored through the Group Tax and Treasury Risk register, which is regularly updated and monitored by the Group Financial Controller and the Group Tax and Treasury department.

We perform annual self-assessments at an entity level within the Group through the Financial Controls and Assurance Reviews (FCAR) which includes the tax governance and control framework. Completed FCARs are submitted to the Vice President, Risk and Control. All entities are subject to the Group internal audit process on a periodic basis, which include the tax governance and control framework.

Our group ethics programme, fraud policy and the whistleblowing policy are all zero tolerance policies and provide mechanisms for reporting concerns about unethical or unlawful behaviour and the organisation's integrity in relation to tax. Any concerns in relation to tax are directly escalated to the Group Financial Controller. Ultimately, the Group Ethics committee (a subset of Group Executive committee) has oversight on these matters.

Disclosures on global tax are provided through well proven processes via the group consolidation system and local Finance Directors have responsibility for the accuracy of information. Information reviewed by the Group Tax Department and then audited as part of external assurance programme. External audit opinion includes corporate tax and relevant tax disclosures within the published accounts.

GRI 207-3 Stakeholder engagement and management of concerns related to tax

As part of our Investor Relations process – any tax questions from stakeholders would be answered via conference calls, face to face engagement, questions answered via direct communication with company, employee engagement and with relevant tax authorities in respect of employment taxes; customers (VAT compliance) and overall ethics compliance. Due consideration is given to tax questions and answered by competent professionals.

In accordance with the Group Tax Strategy, we have an open dialogue and transparent relationships with tax authorities and ongoing engagement wherever we operate. When governments look to develop or change tax policy, they seek input from a range of interested stakeholders, we participate both directly and via our tax advisors to provide our corporate perspective.

Environmental Performance

GRI 305-7 Nitrogen oxides (NO_x), sulphur oxides (SO_x), and other significant air emissions

Partial Reporting

Our primary focus is on reducing our direct CO₂ outputs. However, we do continue to monitor our Volatile Organic Compound (VOC) emissions.

Other significant emissions (kg)	2018	2019	2020	2021
VOCs	156,761	138,460	136,251	127,980

We do not measure persistent organic pollutants, hazardous air pollutants or particulate matter because we emit zero or very negligible amounts at our manufacturing sites, so it is not considered material. We are no longer reporting NO_x and SO_x emissions as these are included in our Scope 1 – Scope 3 GHG emissions as CO₂ equivalents.

GRI 306-2 Waste by type and disposal method

We recognise that the deposition of waste to landfill is not sustainable, permanently modifying land and potentially introducing contamination to both air and water. In 2020 we set a target to eliminate process waste to landfill across our operations by the end of 2024. In 2021, 8 out of our 19 manufacturing sites sent zero waste to landfill.

Total waste by disposal method (t)	2018	2019	2020	2021
Total landfill waste	1,996	1,894	2,868	1,986
Total incinerated waste	5,595	5,564	6,036	9,961
Total other waste disposal routes	36,277	37,687	29,838	32,501
Total recycled or recovered	26,515	29,755	26,927	29,039
Total waste	70,383	74,900	65,669	73,487
Non-hazardous waste by disposal method (t)	2018	2019	2020	2021
Landfill waste	1,874	1,695	1,550	1,428
Incinerated waste	2,653	2,397	2,428	2,511
Other waste disposal routes	34,584	35,850	28,342	29,733
Recycled or recovered	23,741	21,525	20,083	19,804
Total non-hazardous waste	62,853	61,467	52,402	53,476
Hazardous waste by disposal method (t)	2018	2019	2020	2021
Landfill waste	121	111	130	140
Incinerated waste	2,942	2,915	3,408	6,671
Other waste disposal routes	1,693	1,827	1,488	2,758
Recycled or recovered	2,773	2,786	2,867	4,523
Total hazardous waste	7,530	7,639	7,893	14,092

Method of disposal determined either directly by audit or provided by the waste disposal contractor. We do not dispose of waste by composting, reusing or on-site storage.

GRI 306-3 Significant spills

During 2021, we are happy to report that no significant spills occurred.

GRI 307: Environmental Compliance Management Approach

The Croda International Plc Board (Croda) has recognised the importance of aspiring to excellence in the management of environment compliance and has prepared a Policy Statement with which all sites shall comply.

We have had Group Safety, Health and Environment policy documents and manual in place for many years, reflecting the international standard for safety management systems (ISO 45001)

Manufacturing sites have their management system certified to ISO 45001, and in the case of newly acquired businesses this is expected to be achieved within three years of acquisition.

We are committed to the measurement of the SHE performance of our operations against minimum standards to which all sites shall comply. These standards are specified in our Group SHE manual, together with guidance for further improvement in performance in the form of good practice.

The manual is designed to provide reference SHE standards and guidance for each site to assess its own performance and to enable it to develop a SHE programmes aimed at continuous improvement of performance.

Measurement of the performance of individual sites is facilitated by collation and review of information reported to the Group SHEQ Director and by periodic site SHE audits by the Group SHE Department and other competent bodies. The manual is updated periodically to include new techniques and approaches and more stringent standards.

GRI 307-1 Non-compliance with environmental laws and regulations

During 2021, Avanti, Alabaster, US, received a notice of violation for operating without an appropriate permit for its emissions to air. The site has since resubmitted its application as part of its expansion project and approval is expected in the first half of 2022.

Supplier Environmental Assessment – management approach

Supply chain integrity is critical to delivering a sustainable business. In addition to the usual criteria of quality and reliability, we choose suppliers who share our standards for ethics, labour and human rights, the environment and sustainable sourcing. We work closely to help them understand and align with our values and standards, providing them with best practice guidance and tools to measure, improve and promote their sustainability efforts. Our choice of suppliers will continue to be fundamental in helping us achieve our 2030 targets. We did not let the challenges of 2021 distract us from our Commitment as we have continued supplier engagements with RSPO Certification and EcoVadis assessments. This work will continue into 2022 and beyond until we have full transparency in all aspects of our supply chains.

We have partnered with EcoVadis as our framework for sustainability monitoring, using their universal scorecard, benchmarks, and performance improvement tools. This monitoring focuses on four areas: environment, labour and human rights, ethics, and sustainable procurement. To date, we have assessments for suppliers representing approximately 65% of our total spend. We will continue to work with our suppliers to gain higher levels of participation in these assessments and to encourage them to address any gaps, significantly increasing our influence in the supply chain. We recognise the opportunity and responsibility to influence our suppliers to achieve positive sustainability outcomes and introduced three milestone targets in 2021 with this aim. By the middle of the decade, we expect key suppliers to achieve an average EcoVadis (or equivalent) score and/or have action plans in place to address gaps; key suppliers representing at least 50% of our raw material volumes to make public commitments to carbon reduction targets; and suppliers of our crop-based raw materials to provide fully certified supply chain transparency. We reviewed, updated, and issued our Supplier Code of Conduct during 2020, which clearly states our sustainability objectives and fundamental requirements of doing business. It requires acknowledgement and acceptance from all suppliers and is an important tool to develop dialogue with like-minded suppliers who are also making commitments to science-based targets and the SDGs.

GRI 308-1 New suppliers that were screened using environmental criteria

We work with EcoVadis and in 2021 we had influenced suppliers, representing 65% of our spend to complete the EcoVadis questionnaire.

Employment and parental leave

GRI 103: Management Approach

Recruitment - We recognise 'our people are our difference' and the recruitment of a talented and diverse workforce is fundamental to business success. Recruitment and selection exercises will be conducted based on merit, against objective criteria, aligned to our values, that avoids discrimination.

A professional and fair approach to recruitment and selection processes is key to helping us attract and appoint individuals with the high level of skills and attributes needed for us to fulfil our strategic aims and support the Company's Purpose and Values.

In conjunction with local HR teams, it is the responsibility of the relevant site, country or divisional head to ensure local recruitment policies are in place that comply with employment legislation and our policies including the Code of Conduct and the Equal Opportunities and Data Protection policies. Regional Managing Directors and HR Directors will provide oversight within their region, offering advice and guidance as needed.

Parental leave - All our sites will adhere to the minimum standards for parental leave globally. Where local arrangements provide additional benefits, these will continue to be applied.

The global minimum will be 16 weeks leave on full pay for primary carers (maternity leave), and two weeks full pay for secondary carers (paternity leave). Where government or insurance arrangements pay less than full pay for these periods, we will make up the difference.

In addition, primary carers who take leave for up to 26 weeks, will have the right to return to their same job. Again, longer periods are mandatory in some countries and these longer periods will continue to be applied. The same rights will also apply to the two weeks parental leave available for secondary carers.

The administration of parental leave is the responsibility of the regions.

GRI 401-1 New employee hires and employee turnover

Partial Reporting

In 2021, voluntary and involuntary employee turnover across the Group was 8.1%.

Further details on how we are tackling the issue of recruitment and retention can be found in the "Fundamentals" section of our 2021 Sustainability Report.

GRI 401-3 Parental Leave

Partial Reporting

A total of 47 employees took parental leave in the UK in 2020. The parental leave categories are Maternity Leave, Paternity Leave, Adoption and Time off for dependants.

Maternity Leave	Paternity Leave	Adoption	Time Off for Dependants
26	20	1	4

All policies relating to parental leave are freely available on our company intranet and will, as a minimum, comply with the highest legislative requirement in any country in which we operate.

Training and Education

GRI 103 – Management Approach

We will ensure that all employees have the necessary skills and training to undertake the duties assigned to them. The responsibility for training and employee development is shared equally between the employee, their manager, and the Company.

Employees are expected to take responsibility for the continuing assessment and satisfaction of their own training needs using appropriate help from every available source. Employees are expected to explore their own abilities, to understand their strengths and weaknesses, to share their aspirations with their manager and to demonstrate their desire to continue to learn. This should be done in conjunction with the Croda Competency Framework.

All managers are expected to provide regular guidance and ongoing support to employee's, to listen to individual aspirations to evaluate employees' potential for future roles and to help individuals build realistic development plans and identify relevant opportunities to turn these plans into reality.

We believe in enabling employees to reach their full potential through development, training, and education, so that they can contribute fully and progressively to the success of the company.

We are committed to creating an environment which encourages continuous development and training in which employees quickly understand the key values and skill sets required for progression.

GRI 404-1 Average hours of training per year per employee

Partial Reporting

It is only through the continual development of our workforce that we will be able to meet the future demands of our customers in relation to enhanced creativity, innovation, and service.

Our global competency framework and Cornerstone performance management system, My Croda, allows us to monitor the development, performance, and potential of each of our employees. To help grow and retain our talented people, we must continue to invest both internally and externally in training programmes, graduate and apprenticeship schemes, coaching, leadership development and supporting those studying for formal qualifications.

Average hours of training per employee	
Total hours of training for all employees	93,000
Employees receiving training (as percentage of group)	4,451 (81%)
Average hours of training per employee	12.7
Average hours of training for those who received training	21

We are currently unable to report average training by gender or employee category due to limitations of our reporting systems.

GRI 404-2 Programmes for upgrading employee skills and transition assistance programmes

Partial Reporting

We promote learning and training at all levels of our organisations, with 81% of our employees receiving training during the year. We offer a variety of training options including internal training courses delivered by our human resources department, funding for external training courses where

relevant training cannot be provided internally, as well as funding and support for educational development. Several employees have completed part-time or distance learning degree programmes relevant to their position or career development, both funded and supported by the company. Where applicable we also bring in the expertise of external training providers to enhance the skills and behaviours of our employees.

The quality and relevance of training and development activities became more focused in 2015, through improvements in the identification of personal development needs. The launch of our internal 'Learning Module' within My Croda in 2018 has taken our performance development, learning delivery and accessibility to the next level, allowing all employees to have access to the training that is most relevant to them.

GRI 404-3 Percentage of employees receiving regular performance and career development reviews

Partial Reporting

In 2018 we introduced a new Performance Management System as part of a wider implementation of a new integrated global HR system called 'My Croda'.

During 2021, 4,451 employees used this system and over 90% of those employees have completed an end of year appraisal. As we continue to embed Our Purpose, in 2021 we launched a SharePoint site for our new Competency Framework along with new functionality in MyCroda to allow our employees to create their own Development plans linking to our extensive eLearning catalogue.

We are currently unable to report by gender or employee category due to limitations of our reporting systems.

Diversity and Equal Opportunity

GRI 103 – Management Approach

We are committed to creating an inclusive work environment where everyone can fulfil their potential in a workplace that recognises the value of diversity. Broad diversity of thought can create greater business success by enhancing the ideas we have and the way in which we deliver them.

We are committed to building a workplace where everyone feels welcome and can give their best, providing training and education on D&I topics for all employees and understanding any potential biases in our processes, working to reduce them.

Everyone at Croda will be treated fairly, equitably, and free from bias on the basis of race, ethnicity, gender, sexual orientation, physical or mental ability, religion, political views or any other of the protected characteristics.

Leaders must ensure that all people decisions made are free from discrimination and bias and that broad diversity of thought and different perspectives are included in discussions and decision making.

Leaders will also ensure that they promote mutual respect between all employees, helping each other to understand difference.

GRI 405-1 Diversity of governance bodies and employees

Partial Reporting*

Diversity and Inclusion is a key priority for us, and it is one of the material areas of our sustainability programme.

We aim to embrace and empower all individuals. We do this by supporting, valuing and respecting our workforce, and ensuring that all employees feel empowered and included. In this way, we attract and retain the right people and bring out the best in them to benefit from their expertise.

Gender breakdown:

Employee category %	Male	Female
Board of Directors	50	50
Executive Committee	64	36
Regional and Business Board Members and Senior Functional Heads	75	25
Total workforce	63	37

We are currently unable to report minority groups or age by employee category due to limitations of our reporting systems or regional confidentiality of data. Further details on how we are tackling the issue of diversity and inclusion can be found in our 2021 Sustainability Report.

Freedom of Association and Collective Bargaining, Child Labour, and Forced or Compulsory Labour

GRI 103 – Management Approach

We support the United Nations Universal Declaration of Human Rights, which includes freedom of association and collective bargaining as part of our commitment to support the fair and equitable treatment of employees.

Because workers around the world face diverse challenges and regulatory environments, we use a wide range of approaches to ensure their rights are respected. We demonstrate support for freedom of association by providing open and productive dialogue between workers and managers in a variety of mechanisms including recognising trade unions and works councils, regular pulse surveys, listening groups and other communication tools.

In conjunction with local HR teams, it is the responsibility of the relevant site, country or divisional head to ensure employees' rights to Freedom of Association are both respected and supported in line with our Code of Conduct and Human Rights Policy. Regional Managing Directors and HR Directors will provide oversight within their region, offering advice and guidance as needed.

We recognise that every employee has the right to join or remain a member of a trade union if they wish to do so. Equally, the Company recognises that every employee has the right not to join or to leave a trade union. The company will not seek to persuade any employee, potential or otherwise, to join or leave any trade union or other workers' association.

Unless local legislation or legitimate collective agreements require an alternative approach, the company will operate as follows:

- During the recruitment process, the company will not refuse employment on the grounds of trade union membership or non-membership, nor will it stipulate that membership or non-membership is a condition of employment.
- During employment, the company will not dismiss, select for redundancy, or allow the detrimental treatment of any employee based solely on the grounds of whether they are a member of a trade union or not.

- Members of trade unions will also not be dismissed, selected for redundancy, or suffer any other form of detriment for taking part in union activities or making use of union services.
- Where local accounting and social security procedures and legislation allow, the company will enable union members to pay their union subscriptions by deduction from their wages.

Issues concerning violation of employee rights within our supply chain are addressed in the Supplier Code of Conduct document, which has been mailed to suppliers in all regions.

GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk

We recognise that every employee has the right to join or remain a member of a trade union if they wish to do so. Equally the Company recognises that every employee has the right not to join or to leave a trade union if they wish to do so. The company will not seek to persuade any employee, potential or otherwise, to join or leave any trade union or other workers' association.

Unless local legislation or legitimate collective agreement requires an alternative approach, the company will operate as follows:

- During the recruitment process, the company will not refuse employment on the grounds of trade union membership or non-membership, nor will it stipulate that membership or non-membership is a condition of employment. The company will not specify union membership requirements in recruitment adverts and will not require or expect employment agencies acting on our behalf to do so.
- During employment, the company will not dismiss, select for redundancy, or allow the detrimental treatment of any employee based solely on the grounds of whether they are a member of a trade union or not. Members of trade unions will also not be dismissed, selected for redundancy, or suffer any other form of detriment for taking part in union activities or making use of union services; and
- Where local accounting and social security procedures and legislation allow, the company will enable union members to pay their union subscriptions by deduction from their wages. Employees who wish to take advantage of this should make their request in writing to their local pay department, requesting the deduction be made. Similarly, adequate notice must be given to change this arrangement. The individual will then be responsible for ensuring their membership subscriptions are continued.

Whilst all employees have the right to choose whether to be a member of a trade union or not, only where there is a specific current local agreement are unions recognised to communicate, negotiate, or consult on behalf of their members.

Issues concerning violation of employee rights within our supply chain are addressed in the Supplier Code of Conduct document which has been mailed to suppliers in all regions.

Child Labour

GRI 408-1 Operations and suppliers at significant risk for incidents of child labour

All our locations must comply with all relevant legislation regarding Child Labour; we will not employ young persons under the age of 18 in a hazardous role, or at night. We do not tolerate the use of child labour and require that our suppliers do not use children in their operations (including in their value chain).

We ensure our policies are consistent with the spirit and intent of ILO's Declaration on Fundamental Principles and Rights at work, where applicable to business.

Utilising thorough checks during the recruitment process and the Child Labour Index and Map, produced by global risks advisory firm Maplecroft, we have been able to evaluate risks relating to child labour within our operations.

Issues concerning violation of child labour within our supply chain are addressed in the Supplier Code of Conduct document which has been mailed to suppliers in all regions.

Forced or Compulsory Labour— management approach

We have a policy of zero-tolerance towards acts of modern slavery that are unlawful and are a violation of fundamental human rights. We require our suppliers and contractors to comply with all applicable local legislation, as well as adhering to our behaviours and values, supporting us in the delivery of Our Commitment.

GRI 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour

We ensure our policies are consistent with the spirit and intent of ILO's Declaration on Fundamental Principles and Rights at work, where applicable to business. At Croda, we comply with the labour laws of the countries in which we operate and would never endure forced or compulsory labour anywhere in the world.

Issues concerning violation of forced or compulsory labour within our supply chain are addressed in the Supplier Code of Conduct document which has been mailed to suppliers in all regions.

Transparency within our supply chains is of key importance to us. All our suppliers must go through an approval process where we check their quality systems and performance. We completed our initial work with SEDEX (Supplier Ethical Data Exchange), which involved asking 200 of our suppliers based on their geographical location and market origin, to register with SEDEX and complete their questionnaire. We have analysed results from suppliers and started to risk assess them developing a process flow diagram to help us act where necessary. In 2022, our corporate ethics committee will continue to engage with, and assess, suppliers in countries where there is a higher risk of modern slave labour.

Local Communities

GRI 103 – Management Approach

We add value to local communities around the world through educational initiatives and by encouraging employees to get involved in local good causes. This approach is key to establishing the strong local relationships that are essential to maintaining our social licence to operate, particularly in a world where global drivers indicate that trust in business is becoming more uncertain.

Our community involvement is facilitated through a programme called the 1% club, which allows all employees across the group to utilise 1% of their working time to support appropriate community projects. The 1% club is adapted to suit the local needs and legislative environment of the regions in which we operate, but in every form the guiding principle is action that supports the community through direct involvement.

It is the responsibility of our regional boards to ensure that the 1% club is available and managed correctly in their operations. Additionally, a network of 1% club champions, one at each of our operations, assists with the coordination of activities on a day-to-day basis.

In addition, it is the responsibility of each of our regional boards to define and implement a local programme of activities that is appropriate to support the teaching of science, technology, and engineering across any chosen age group between the ages of 5 and 21. Our aim is to align the learning needs of individuals with the scientific knowledge and history of our organisation. Our 1% club champions support community education by building relationships with local schools, colleges, and universities. Annual regional plans will help target the specific needs of the educational institutions we support and will also identify the employees who can enhance their personal skills through this type of activity.

GRI 413-1 Operations with local community engagement, impact assessments, and development programmes

Interaction with local communities has always been a major part of our culture. We are aware that our activities have a direct impact on the communities surrounding our operations, particularly our manufacturing sites and large offices.

Employees at our sites worldwide are active members of their local communities. Understandably, our neighbours expect us to act responsibly, safely, and sustainably. We take our commitment to our communities seriously, going further to make a positive difference and support them at times of need.

Through the Croda Foundation we aim to improve the lives of one million people in relevant communities by 2030, a key pillar of our Commitment to be People Positive.

We focus on two key areas: community education initiatives and employee volunteering for local good causes. These activities are key to establishing the strong local relations that are essential to maintaining our social licence to operate and are facilitated through our award-winning employee volunteering scheme, 1% club.

Since the global launch of the 1% club in 2010, we have seen a significant increase in activity and participation, largely through our network of 1% club champions. These champions work at every site that we operate to ensure our community activity meets local needs and that all our operations take ownership of their engagement activities.

We believe that enhancing our investment in community education will only serve to further improve our external reputation, thus leading to a positive impact on our ability to recruit new personnel. Our business is steeped in scientific heritage and our business model is based on the delivery of market led innovation. Also, with the number of students studying science, engineering, and technology in decline, we feel that we have a duty to encourage and educate young people about the benefits of a scientific education.

Public Policy

GRI 103 – Management Approach

Our overall commitment is to uphold the principles of socially responsible business practices and respect the interests of everyone affected by its activities and actions, including our employees, customers, suppliers, shareholders, and the general community at large.

It is our policy to always conduct our business throughout the world with honesty and integrity and we operate a range of policies covering all areas of our business. We believe that all our stakeholders wish to be associated with an ethical organisation which publicises and upholds high standards in all that it does. Our Code of Ethics states that: -

- We will comply with the law in each country in which we do business including laws relating to unfair competition/anti-trust.
- We will not offer to pay, solicit, or accept bribes in any form whether directly or indirectly. This includes payment or receipt of "facilitation payments" which are small payments or gifts made as common practice in some countries to obtain approvals, permits, etc. more speedily – they are still bribes. We promote measures to eliminate these types of payment. Employees should ensure they comply with all local laws and regulations. If you are requested to make a payment which you believe may be a facilitation payment you should consult your line manager.
- We will only give or receive gifts and entertainment that are not material or regular. Local management in each country will establish guidelines reflecting local custom as to the maximum permitted value and the circumstances in which such gifts and entertainment are acceptable.
- We will record in our published accounts all material assets and liabilities and not maintain secret accounts.
- We will not make political donations anywhere in the world.
- We will not engage in commercial espionage or covert surveillance of our competitors.

Failure to comply with this code may result in disciplinary action. All employees have the right to make confidential reports direct to the company secretary of Croda International Plc at Cowick Hall, Snaith, East Yorkshire DN14 9AA, United Kingdom, without fear of detrimental action being taken against them.

GRI 415-1 Political contributions

Our Code of Ethics states that “We will not make political donations anywhere in the world.” The full Code of Ethics can be found on www.croda.com under company policies. No donations were made for political purposes during the year, in accordance with our Code of Ethics.

Glossary and report abbreviations

TERM	DEFINITION		
%	Percent	SO _x	Sulphur Oxides
£	Pounds Sterling	SPA	Special Protection Area
£M	Million Pounds Sterling	t	Tonnes
AGM	Annual General Meeting	T&D	Transmission and Distribution
ASD	Action for Sustainable Development	tCO ₂ e	Tonnes CO ₂ equivalent
CDP	Formerly Carbon Disclosure Project	tpa	Tonnes per annum
CH ₄	Methane	TRIR	Total Recordable Injury Rate
CO ₂	Carbon Dioxide	UK	United Kingdom
COD	Chemical Oxygen Demand	UN	United Nations
CSR	Corporate Social Responsibility	UNEP	United Nations Environment Programme
D&I	Diversity and Inclusion	UNESCO	United Nations Educational, Scientific and Cultural Organization
ECHA	European Chemicals Agency	USA	United States of America
EEMEA	Eastern Europe, Middle East and Africa	UV	Ultraviolet
EFSA	European Food Safety Authority	VOC	Volatile Organic Compounds
EO	Ethylene Oxide	VP	Vice President
ERP	Enterprise Resource Planning	%	Percent
ESG	Environmental, Social and Governance		
FDA	Food and Drug Administration		
GHG	Green House Gas		
GHS	Global Harmonizes System		
GJ	Gigajoule		
GPS	Global Positioning System		
GR	Genetic Resource		
GRI	Global Reporting Initiative		
GSSC	Group Sustainability Steering Committee		
HFCS	Hydrofluorocarbons		
HR	Human Resources		
ILO	International Labour Organization		
ISO	International Organization for Standardization		
KPI	Key Performance Indicator		
LCA	Life-cycle Assessment		
LTI	Lost Time Injuries		
M ³	Cubic metre		
ML	Mega Litre		
MSDS	Master Safety Data Sheet		
N ₂ O	Nitrous Oxide		
NGO	Non-Governmental Organisation		
NO _x	Nitrogen Oxides		
NPP	New and Protected Products		
OSHA	American Occupational Safety and Health Administration		

OSHAS	Occupational Health and Safety Assessment Series
P	Pence
PFCS	Perfluorinated Compounds
PLC	Public
PSRA	Product Safety and Regulatory Affairs
R&D	Research and development
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RSPO	Roundtable on Sustainable Palm Oil
SAC	Special Area of Conservation
SDG	Sustainable Development Goal
SEDEX	Supplier Ethical Data Exchange
SF ₆	Sulphur hexachloride
