

CHAIR'S STATEMENT

Purpose at the heart of ongoing success

As we report on another year of strong results, I am delighted that we have demonstrated once again that leading with purpose – in our case the push for a greener, healthier, more connected advanced society – is an active enabler of business growth.

The strongest and most innovative businesses operating today – and I count Oxford Instruments among these – are focusing on making a positive impact on people and the planet. Together with our Horizon strategy, now fully embedded in the way we operate, our commitment to a better world shapes the markets we choose to serve and helps us better understand our customers' priorities.

In fields as diverse as Healthcare & Life Science, Energy & Environment, Semiconductor & Communications, and Quantum Technology, we are at the heart of exciting developments, united by our ability across our portfolio to help customers to characterise materials and living samples at the molecular and atomic level. These are growing markets, as our results demonstrate, with significant potential for further growth.

The breadth of our markets, and our ability to support such a wide range of customers at every stage from academic research through to high-volume manufacturing, have also been a source of real strength in the challenging times all businesses have faced in the past few years. A further, crucial, source of strength is our people, without whose drive and creativity we would not be able to make the remarkable progress we continue to make year on year.

We have faced macro-level challenges from inflationary pressures, supply chain shortages and the ongoing impacts of Covid-19 lockdowns in China, an important market for us. However, the resilience we have built into our business model, combined with the commitment and focus of everyone at Oxford Instruments, for which the Board and I are immensely grateful, have enabled us to end the year as we began it, in a position of strength.

Investing for the future

Our confidence in our people, our strategy and our purpose to foster future growth has underpinned continuing investment in the business throughout the year, as Ian details in his review of the year (pages 20 to 25). A successful business is not built solely on the here-and-now, but on a clear-eyed vision for the future. That is why, by growing our talent base, developing new manufacturing facilities at Belfast and Bristol, and investing in IT and systems Group-wide, we are building on our existing strong foundations to ensure we are in the best possible position to capitalise on global demand for our products and services. We also continue to invest in innovation, the corporate DNA on which we were founded more than 60 years ago, to ensure a strong pipeline of new developments, capitalising on our longstanding ability to stay one step ahead of the markets in which we operate.

Setting an ambitious sustainability agenda

That forward vision also drives us to be ambitious in the way we operate our business, striving to be ahead of the curve in being an environmentally responsible, socially progressive and well-governed organisation. I am proud of the progress we have made this year on our sustainability agenda, most

notably through developing and setting a new and more ambitious 2045 net zero target, and continuing to reduce our carbon footprint, delivering a 55% reduction in emissions since 2018/19 (see pages 52 to 71).

We continue to challenge ourselves to be an inclusive, diverse and representative organisation, and I am proud that our recent engagement survey bears this out, with over three quarters of colleagues agreeing that we strive to create diversity (see pages 73 to 74). We are making progress at Board level, and throughout the organisation, as I have been able to observe through the positive engagements I and fellow Board members have had with employees across the Group this year. We are on track to reach our target of 40% of senior leadership roles being held by women by 2025, and this year employees have instigated new impact groups focusing on underrepresented groups. However, there is no room for complacency, and we will continue to further this agenda in the coming years.

Welcome and farewell: Board changes during the year

We were delighted in September 2022 to welcome Reshma Ramachandran to the Board as a Non-Executive Director (see Q&A, page 123). With her strong engineering credentials and strategic business acumen, Reshma is already adding significant value both in Board discussions and through her engagement with the wider workforce.

Following the close of the year, Chief Executive Ian Barkshire informed the Board of his intention to retire. Ian has led Oxford Instruments through a period of remarkable growth, positioning it in structural growth markets, as set out above, and transforming the organisation into a global leader through the

deployment of the Horizon strategy. On behalf of the Board and all his colleagues, I would like to thank Ian for the tremendous contribution he has made and continues to make.

I am delighted that Richard Tyson, currently CEO of TT Electronics plc, will be joining us to lead us through the next phase of our growth. With his record of success and wealth of expertise in high-technology innovation and global manufacturing, Richard is ideally suited to build from our current position of strength and continue our positive trajectory.

In a further forthcoming change, Sir Richard Friend has notified the Board of his intention to step down as a Non-Executive Director in July after serving his full nine-year term. Richard's deep technical expertise has made him an asset to the Board, and we sincerely thank him for the rich contribution he has made to Oxford Instruments.

Dividend

In line with our progressive dividend policy and strong trading performance in the year, the Board is proposing an increased final dividend of 14.9p per share (2022: 13.7p), which is subject to approval at our Annual General Meeting on 19 September 2023.

Looking to the future

As we prepare for new leadership, our focus for the next 12 months remains as it has been this year: on delivering increased value and a positive impact for all our stakeholders. I am in no doubt that we do so with our best foot forward, stronger than ever and confident in the successful business model that has driven our growth to date.

Neil Carson
Chair

14 July 2023

CHIEF EXECUTIVE'S REVIEW

Making a positive impact for customers, shareholders, society and the planet

As I reflect on the past 12 months – my last full year as Chief Executive – I am proud of the Group's performance, with record orders, accelerated organic revenue growth, strong profit growth and margins in line with the previous year despite the inflationary environment during the year, and the investment made to support future growth.



"These results provide a strong foundation for future growth and margin expansion."

Ian Barkshire
Chief Executive

This marks another year of strong progress. Our continued success stems from the commitment, innovation and talent displayed daily by our people globally, combined with the clarity and focus brought by our Horizon strategy, which is thoroughly embedded across the Group, and in the way we work together and place customers at the heart of everything we do. This provides a solid foundation for future growth and margin expansion.

From helping academic customers to achieve Nobel prize-winning scientific breakthroughs, to supporting commercial customers' productivity and enabling them to develop and apply the disruptive technologies of tomorrow, we are making a positive impact on an ever-changing world, in line with our overarching purpose to enable a greener, healthier, more connected advanced society.

We provide market-leading differentiated technology and expertise in markets with long-term structural growth drivers – Healthcare & Life Science, Advanced Materials, Semiconductor, Energy & Environment, Quantum Technology, and Research & Fundamental Science – that provide a foundation for growth ahead of the market. As we develop our market and customer intimacy, and invest in the business, we are able to sell an increasing range of products to existing customers, as well as adapting our products and services for new and adjacent markets.

All these factors have contributed to our strong financial performance in the year, with double-digit growth in reported orders, revenue and adjusted operating profit despite inflationary pressures, a lag in price increases taking effect, and supply chain challenges. With strong revenue growth, and price increases beginning to work through the order book, this resulted in a positive second half weighting. Reported adjusted operating profit for the year increased by 21.4%, while reported adjusted operating margin was in line with the previous year at 18.1% (2022: 18.1%) and broadly maintained at constant currency. We ended the year with record order intake of £511.6m, with a book-to-bill ratio of 1.15 resulting in 22.8% growth in the order book to £319.6m at 31 March 2023 (2022: £260.2m). The strong revenue performance was also reflected in adjusted EPS increasing by 19.5% to 112.7p (2022: 94.3p). With net cash of £100.2m at 31 March 2023 we are in a strong position

to invest in future organic and inorganic growth.

Our performance reflects increasing demand across our markets, with particularly strong growth from our Advanced Materials, Quantum Technology, Semiconductor and Healthcare & Life Science markets. This has resulted in strong constant currency revenue growth across each of our three sectors – Materials & Characterisation (19.2%), Research & Discovery (8.1%), and Service & Healthcare (9.6%). This was achieved despite significant global supply chain shortages and ongoing Covid-related disruption in China negatively impacting several of our businesses.

Supply chain issues eased through the second half, supporting stronger revenue as anticipated. Revenue into China was broadly in line with the prior year, with double digit order growth supported by increased funding as lockdown disruption eased in the fourth quarter. This growth rate also reflected an increase in UK Government export licence refusals to Chinese customers, particularly for quantum technology and astronomy applications, offset by our continued shift in focus to other growth markets within the country, such as life science and renewable battery technology, in which there are fewer export licence considerations. We also increased our focus on North America, Europe, and Japan, in line with the increased demand in several of our markets, including semiconductors and quantum. This was reflected by strong constant currency revenue growth in these regions (with the US up 35%, Europe up 16% and Japan up 25%).

➔ FURTHER READING

For more on our positive impact for customers, people and planet / **Pages 10–17**

For more details of what we have achieved in the year / **Pages 38–51**

For more on our approach to sustainability / **Pages 52–81**

Orders

£511.6m

(2022: £423.1m)

Revenue

£444.7m

(2022: £367.3m)

Adjusted operating profit

£80.5m

(2022: £66.3m)

Operating margin

18.1%

(2022: 18.1%)

CHIEF EXECUTIVE'S REVIEW continued

Group	Full year to 31 March 2023	Reported growth	Constant currency growth
Orders	£511.6m	20.9%	14.2%
Revenue	£444.7m	21.1%	14.0%
Adjusted operating profit	£80.5m	21.4%	13.4%
Adjusted operating margin	18.1%	-	(10bps)

Strategic progress

Our Horizon strategy continues to provide an important framework, delivering tangible value and positive outcomes for customers and stakeholders, and offering a blueprint for ongoing growth. Strategic progress in the year is as follows.

Market intimacy is integral to our success as we develop insights into the future of our markets, and how we can support customers in accelerating their roadmaps, which, in turn, ensures our products are well-positioned commercially. An example is the deep insight we have developed across our portfolio of materials analysis techniques to support the renewable battery market. This has resulted in significant growth in orders and revenue. In Healthcare & Life Science, our insight has resulted in the development of new microscopy products and tailored software for specialist markets.

Our focus is on nurturing existing markets, expanding into adjacent markets and landing new key accounts. To drive this, we have invested in the size and capabilities of regional sales and marketing teams, equipping them to develop an in-depth understanding of local markets.

Through the headwinds of the past few years, we have maintained our focus on **innovation and product development** to ensure we remain at the forefront of our markets. Our leading products are designed with customer productivity and ease-of-

use at their core, and support our accelerating organic growth and improving gross margins.

The combination of our market intimacy and focused approach to product development has supported a three-year order CAGR of 15% to both commercial and academic customers.

Operational excellence is a key focus as we seek to boost our own productivity and shorten lead times to support the growing demand for our products. We have continued to strengthen relationships with strategic suppliers and further consolidate our supply chain, with a view to long-term resilience and environmental sustainability, and are investing to optimise production capacity.

Our investment in building regional teams is also a key element of our **customer service and support** strategy, enabling us to improve response times by being closer to customers and by training our service teams across a wider range of products. We are developing a broad range of increasingly advanced and tailored services which enhance our customers' capabilities and optimise productivity, strengthening customer demand for recurring service contracts.

We also continue to invest in increasing digital and remote service capabilities. These drive benefits for customers, colleagues and the environment whilst improving our efficiency.

Investing for growth

Aligned with our Horizon strategy, and future growth ambitions, we have invested significantly during the year to bring new products to market, and position ourselves to deliver process and cost efficiencies. This includes reinforcing and extending capabilities across the business, including investments in our teams, infrastructure and IT.

Research and development

Customer-centric, market-led research and development (R&D) is central to our success as it enables us to transform our customers' outcomes. Investment in the year increased 9.8% to £34.8m (2022: £31.7m), representing 7.8% (2022: 8.6%) of revenue. Our Vitality Index (which measures the percentage of revenue from products launched over the last three years) is 30% (2022: 34%). This represents positive uptake from our newly launched products and continued strong value across our portfolio as we expand our reach into adjacent markets.

During the year we have brought a number of exciting new, leading-edge products to market. These include:

- New processes and techniques for both compound and silicon semiconductor fabrication, including patented processes being deployed to manufacture higher-performing power devices used across commercial electronics and industrial applications.

- A battery-specific edition of our Cypher atomic force microscope, advancing battery development through the direct observation of critical chemical processes during operation.
- Our new large-scale cryogenic platforms which are advancing the performance of quantum computers.
- A high-end extension to our optical microscopy portfolio, Dragonfly 600, which provides healthcare and life science customers with unprecedented imaging speed and quality.

People, productivity and infrastructure

We have made additional investment elsewhere to scale the business, to drive enhanced productivity and shorten lead times for our products. We have invested in enhanced IT systems, including a new integrated customer and service relationship management system. In response to our strong positive trajectory, and in anticipation of continuing growth, we have invested in people across the business, focusing on training and development as well as selectively increasing headcount, with a particular focus on production capacity, and regional sales and service.

Our purpose-built, state-of-the-art compound semiconductor facility in Bristol, UK, is set to double our production capacity in this important and growing market once it is fully operational, which is expected to be later in the current financial year. We are also making significant investment in extending our production capacity and footprint at our Belfast, UK facility to address growing demand for our range of advanced scientific cameras and microscopy products.

Inorganic growth

Our strong balance sheet, with net cash of £100.2m at 31 March 2023, positions us well to make further acquisitions to augment our strong organic growth. We maintain a pipeline of opportunities in a number of target areas, aligned with our strategy.

We have been delighted with the performance of our August 2021 acquisition WITec, which is part of Materials & Characterisation.

In particular, WITec, which specialises in Raman microscopy, has benefited from increased sales due to our global channels to market and overlapping customer base. The business has continued to perform ahead of our expectations.

Inventory

We continue to maintain elevated inventory levels to mitigate ongoing supply chain issues, and to ensure competitive lead times.

SUPPORTING ENVIRONMENTAL SCIENCE

Helping to tackle microplastic pollution

Advancing understanding

As governments and organisations all over the world seek to understand and tackle the potentially harmful effects on human health and ecosystems caused by microplastic contamination in water, our equipment is playing a vital role in helping to understand the scale of the challenge.

Customers are using our Raman microscopes and advanced analysis software to identify, analyse, and quantify the plastic particles polluting our oceans over large sample areas, establishing not just how many of these infinitesimally small particles are in a particular sample but also the source material: from plastic drinks bottles to polystyrene.

CHIEF EXECUTIVE'S REVIEW continued

A sustainable future

I am pleased to report strong progress in our longstanding work to embed sustainability as an integral part of our values, which influences not only day-to-day decisions within our own operations but also actions in relation to our wider impact and stakeholders, including supply chain partners. This year, our absolute Scope 1 and 2 emissions have reduced by 7%, while our emissions intensity per £million of revenue – a helpful measure for a growing organisation like ours – reduced by 23%. Since 2019 – our baseline year – we have achieved a 66% reduction in emissions intensity. Our absolute Scope 1 and 2 emissions have reduced by 55% over the same period. This figure reflects changes in our portfolio as well as energy saving and carbon reduction measures.

Our work continues, and we are delighted to announce our new, accelerated commitment to reach net zero carbon emissions by 2045. In addition, we have set shorter-term targets to reduce our Scope 1 and 2 emissions by 50% and 70% respectively by 2030. Over the next year we will submit our targets and roadmap to the Science Based Targets initiative for formal validation. We will also continue the work already underway with our supply chain to model a robust reduction plan for Scope 3 emissions.

Supporting our employees also remains central to our values, and in recognition of the impact of global inflationary pressures on employee household budgets, we have taken action to support our people in relation to the cost-of-living crisis. Accordingly, we brought forward our Group-wide annual salary review

from July to April 2022, and followed this up with a further one-off cost-of-living payment in October 2022 for employees most impacted.

We are also focused on fostering a strong talent pipeline, as well as investing in supporting and developing the talented people we already employ. This year, we are taking on an increased number of apprentices, across a broader range of disciplines. We have also expanded our internal development programmes, including the development of future leaders, by increasing the number of participants in our Leadership Programme.

More broadly, we continue to build an inclusive and progressive culture, striving to be ahead of the curve in our equality, diversity and inclusion targets, listening to and engaging with our employees as we seek to create a culture where everyone feels able to be their authentic self at work. To this end, we have created a number of new employee impact groups in the year, with more planned for the coming year.

And of course, our contribution to sustainability goes far beyond the way in which we operate our business – indeed it is central to our purpose, to enable a greener, healthier, more connected advanced society. We help our customers to make a tangible positive impact on the world in all these areas. Using our products and services, customers are developing new materials and approaches to enable the critical energy transition which will directly impact everyone on the planet, as the world's governments and businesses pursue the goal of reaching net zero carbon emissions. In healthcare, our products are enabling medical researchers to understand the

fundamental mechanisms of disease, accelerating their progress on new medicines and treatments. We are also instrumental in the drive towards a more connected future, where everyone, everywhere can access information whenever they need – with a particularly meaningful impact in the emerging economies where connectivity has been proven to improve lives and increase prosperity.

Our aspiration is that everything we do can contribute to a more advanced society for all.

Supporting a smooth transition

In April 2023, I announced my intention to retire as Chief Executive. As my time in post nears its end, I want to thank all my colleagues, who have made the past 25 years so rewarding and fulfilling. Their warmth, talent, and spirit of relentless innovation have helped Oxford Instruments to become one of the most exciting technology companies operating today, consistently delivering positive impacts through disruptive change to the world. It has been a privilege and an honour to lead such talent over the past seven years, and I am delighted the company is in such a strong position as I prepare to hand the baton on to my successor, Richard Tyson. With a robust strategic foundation underpinning growth in all key areas, I look forward to supporting a smooth transition and I wish Richard and the team every success in the future.

Summary and outlook

The Group's continued positive momentum reflects our purpose-driven focus on structural growth markets that are enabling a greener, healthier, more connected advanced society. Our deep understanding of our customers' needs and the drivers of growth in our markets, combined with our product leadership, our relentless innovation, and our commitment to operational excellence – all key elements of our well-embedded Horizon strategy – have supported a strong set of results and underpinned continuing investment for future growth.

We have delivered growth in orders, revenue and profit, as well as maintaining margin, with performance strengthened in the second half as we converted our order book and realised the benefits of new pricing structures.

While mindful that the wider macroeconomic context remains challenging, our record order book and strong positions in attractive end markets underpin our confidence in the future growth of the Group. Our strong balance sheet positions us well to invest in people, infrastructure

and innovation, and to make synergistic acquisitions to augment our organic growth. Full-year outlook is in line with our expectations.

Ian Barkshire
Chief Executive

14 July 2023

Making a positive impact on the world

Enabling a greener...



- Facilitating development of materials for electric vehicles.



- Speeding progress of next generation batteries.



- Enabling analysis of microplastics and pollutants in water.

...healthier...



- Enabling breakthroughs on cancer, dementia and malaria.



- Facilitating the development of personalised medicine.



- Supporting rapid understanding of viruses, including Covid-19.

...more connected...



- Helping data centres operate effectively and sustainably.



- Supporting the growth of 5G networks.



- Enabling increased bandwidth and greater connectivity.

...advanced society.



- Helping turn today's science into tomorrow's technology.



- Accelerating the commercialisation of quantum computing.




- Helping optimise advanced materials for a sustainable economy.

REASONS TO INVEST

Our investment case is centred around the following key characteristics

Our purpose, and our customer-centric, market-focused strategy are driving increasing demand from structural growth markets for our world-class solutions.

<p>1. Strong positions in sustainability-focused markets with long-term growth characteristics</p>	<p>2. Provision of differentiated technology, offering customers value-adding capabilities and performance</p>	<p>3. Strategic diversification across markets, geographies and customers provides resilience</p>		<p>4. Increasing proportion of recurring service and support revenue, with significant opportunity for further growth</p>	<p>5. Relentless innovation, with continual investment at the leading edge of our high-tech markets</p>	<p>6. Focus on driving operational excellence across the business</p>	<p>7. Strong balance sheet and cash-generative characteristics, well positioned to invest for organic and inorganic growth</p>
<p>We operate across end markets with long-term growth drivers: Healthcare & Life Science, Semiconductor and Communications, Advanced Materials, Energy & Environment, Quantum Technology and Research & Fundamental Science.</p> <p>Our markets contribute significantly to a greener, healthier, more connected advanced society, in line with our purpose. They are reinforced by global sustainability drivers, including the switch to renewable energy and EVs, the development of more effective medicines and healthcare, better food safety and increased connectivity via 5G and IoT applications.</p>	<p>We provide premium technology with high-end capability and functionality, which are critical to the success of our customers.</p> <p>Our advanced capabilities are designed for ease of use, resulting in reduced training time and wider application.</p> <p>We also provide additional software products enabling efficient, in-depth analysis of high-volume raw data for faster results.</p>	<p>Our resilience is derived from our positions across six primary growth markets, and multiple sub-segments. We have a proven ability to apply our technologies to attractive new end markets, providing further diversification and additional growth.</p> <p>As a result of our premium capabilities, our customer list spans both academic institutions and blue-chip commercial customers, in roughly equal proportions. Our products are used in fundamental research, applied research and development, and high-tech manufacturing.</p> <p>We have a global customer base with significant revenue from Asia, North America and Europe.</p> <p>Our structural diversity means no individual customer accounts for more than a single digit percentage of revenue.</p>		<p>We have an increased focus on the provision of tailored, long-term support contracts at product sale with attractive margins that enable customers to optimise their use of our equipment throughout its lifetime.</p> <p>This end-to-end service offering supplements our revenue from each customer, with scope to increase this further. Market-specific software products provide further tailored support to increase customers' capabilities.</p> <p>We are making the provision of our service offerings more effective and efficient by cross-training employees across product lines, developing regional service centres closer to our customers and increasing the use of remote service options.</p>	<p>Our investment decisions are aligned to our market intimacy – understanding the evolving trends in our markets – and based on understanding the needs of our customers.</p> <p>We develop and update long-term technology roadmaps which guide where we invest.</p> <p>We have a high level of ongoing R&D investment (typically at 8-10% of revenue per annum), to keep our products at the leading edge of technology.</p>	<p>We are investing in production capabilities and increased capacity, including the creation of state-of-the-art facilities. Together with a focus on enhancing the resilience and sustainability of our supply chain, this will drive our profit margins higher, with significant opportunity remaining to increase our profitability.</p> <p>We are also investing to enhance our customer service, including digitalisation.</p>	<p>Over and above our significant organic investments, we seek to supplement our growth strategy, where appropriate, by acquiring highly complementary businesses which provide enhanced opportunities within our target markets.</p> <p>Our strategy is to buy carefully and prudently in markets and technologies we know well, with strategic fit and leading capability a necessary pre-requisite to acquisition.</p> <p>Our strong and prudent balance sheet and cash-generative business model ensure we are well positioned to pursue opportunities.</p>
	 						
<p>Six end markets with long-term growth characteristics</p>	<p>8% of revenue invested in R&D</p>	<p>50/50 split between commercial and academic/government customers</p>		<p>16% of revenue from Service & Healthcare</p>	<p>30% Vitality Index – % revenue derived from products launched in the last three years</p>	<p>c.£70m multi-year investment in a state-of-the-art compound semiconductor facility</p>	<p>£100.2m net cash at 31 March 2023</p>
<p>→ See Market context / Pages 28–29</p>	<p>→ See Operations review / Pages 38–51</p>	<p>→ See At a glance / Pages 6–7</p>		<p>→ See Service & Healthcare / Pages 50–51</p>	<p>→ See Purpose in action / Pages 10–17</p>	<p>→ See Chief Executive's Review / Pages 20–25</p>	<p>→ See Finance Review / Pages 82–93</p>

MARKET CONTEXT

Meeting the needs of our customers in attractive end markets

By building strong relationships with our customers, we can understand more about the changing drivers in our end markets, anticipating customer needs and helping to address them.

As a result, we believe that our strong position in our end markets will continue to create value for our customers and present significant opportunities for economic growth.

Healthcare & Life Science

A growing and ageing population is placing healthcare systems all over the world under great strain due to the increased number of people living with medical conditions that impact their daily lives. Building an understanding of fundamental disease mechanisms at the cellular and molecular level is helping to accelerate the development of new, more effective medicines, at a lower cost than was previously possible.

Semiconductor & Communications

The ever-increasing push for more sophisticated consumer electronics, greater connectivity, and the associated exponential increases in data, are driving the need for increased semiconductor chip production. With this growth in demand comes the need to minimise environmental impact. Critical applications, including autonomous vehicles, augmented reality, AI, high-speed networks and hyperscale data centres require higher-performing, more energy-efficient, high-quality devices that can be produced at high volume.

Advanced Materials

Advanced materials are the building blocks of today's society, with growing demand for lighter, stronger, higher functioning and more sustainable materials across a wide range of markets. The design and manufacture of safer cars, more efficient battery storage, more sustainable materials for construction and new materials for medical implants all rely on the ability to accurately measure their composition and structure down to the nanoscale.

Energy & Environment

In energy, the need to transition away from fossil fuels and decarbonise the economy is driving a focus on alternative forms of generation, distribution and storage. In the broader environment sector, there is more focus on sustainable food production to serve a growing population, together with increasing requirements for food safety and the characterisation of food composition.

Water quality testing, microplastic detection and the sustainable sourcing and use of minerals are further environmental drivers shaping the market.

Quantum Technology

The market continues its rapid evolution from early-stage research into applied research and development and the growing commercial market. Quantum computing remains highly disruptive, with the ability to revolutionise end markets including drug discovery, climate change, logistics and financial services by helping solve complex problems which are beyond the capability of current computers.

Research & Fundamental Science

Fundamental shifts in technology and capability are driving increased research and applied development as we continue to understand the world around us. In the global race for technical leadership, both academic and commercial researchers are investing to help advance societies and support sustainable economic growth. This is driving advances in new materials and devices as well as fundamental research in the physical sciences, including astrophysics.

Market drivers

- The quest to find cures for life-threatening and chronic illnesses is driving further research into the pathology of disease states to support understanding of their origins and progression.
- Growing recognition that individuals respond to treatment in different ways is driving the demand for advanced and personalised treatment plans.

- Increased demand for more efficient and faster power devices to support a green economy.
- Increased investment in improved connectivity and the deployment of human-machine interfaces (e.g. facial recognition), resulting in the need for enhanced bandwidth, capacity and speed.
- Governments and businesses seeking to protect against supply chain shortages.

- The need to develop, control and repeatedly manufacture new materials such as super alloys, while continuing with quality control and analysis of existing products.
- Environmental drivers, including the need to decarbonise commodities such as steel and concrete, and reduce raw material usage and wastage in manufacturing.
- The move towards higher-performing materials and super alloys in automotive and aerospace industries.

- The drive for improved battery technology with less reliance on finite and expensive components, and more efficient and effective alternative energy sources, such as wind and solar.
- Sustainable supply of goods and foods to enable an advanced society.
- The drive towards a less polluted, more sustainable planet with more responsible use of resources.

- Quantum technology is making progress from fundamental science to applied research, targeting commercial applications with end-market drivers including quantum computing, secure communications, advanced sensors and imaging.
- Significant breakthroughs in the development of quantum technologies are increasing the level of global investment and accelerating practical commercial exploitation of the technology.

- Increasing academic interest is driving international funding for research into fundamental material properties.
- Continued interest in astronomy driven by the exploration of the universe, the tracking of space debris and the monitoring of solar activity.

Our response

- Our advanced imaging and analysis solutions, including our scientific cameras and microscopy systems, are helping to reveal sub-cellular detail, while allowing observation of real-time interactions to help understand our immune response to foreign organisms.
- Our cameras are being used in gene sequencing, helping researchers learn more about how genetics influence response to therapies to enhance success rates of treatment.

- Our etch and deposition process solutions are used across a range of semiconductor, device and materials applications to help develop next-generation disruptive technology.
- Our leading expertise in the processing of compound semiconductors is helping deliver speed, capacity and energy efficiencies.
- Our image and analysis solutions are supporting quality control, yield management and next-generation device development.

- Our solutions enable faster and more accurate assessment of the properties of advanced materials, as well as their performance and reliability, through the design and precise control of the composition, micro-structure and thin films coatings.
- Our ability to measure a range of critical properties helps manufacturers assess process performance and quality; e.g. by detecting nanoscale impurities which can degrade performance, they are able to avoid catastrophic failures.

- Our imaging and analysis solutions are supporting current manufacturing, while helping improve the performance and storage capability of batteries and solar cells by helping researchers understand their structure at the nanoscale.
- Our benchtop analysers are playing an increasing role in quality control and assurance in the food industry, helping establish oil and fat content and nutritional values.

- Our cryogenics, advanced fabrication, imaging and characterisation solutions are all critical to the advancement of quantum, and provide the fundamental capabilities and platforms to enable both the research and development of viable commercial applications.
- Our single-photon-sensitive cameras are helping researchers investigate and develop quantum optics, which are required for secure quantum-based communication systems.

- Our extreme and controlled environments enable researchers to make ground-breaking discoveries of new materials and novel phenomena, furthering our understanding of material structures, properties and performance.
- With our scientific cameras, astronomers can see more detail than ever before, allowing them to discover new exoplanets, safely operate satellites around space debris and predict interruptions caused by solar flares.

OUR BUSINESS MODEL

Helping to create a more sustainable future

Driven by our purpose
To enable a greener, healthier, more connected advanced society.

Impacted by:

Our stakeholders
Engagement with our stakeholders allows us to grow and execute our strategy, so we consider the impact we have on them, as well as what they consider important, when developing our plans for long-term success.

Our markets
The health and resilience of our chosen end markets has played a critical role in our strong performance. We believe our strong position in these end markets, along with their structural growth drivers, will continue to create value for our customers and present significant opportunities for sustainable economic growth.

Our management of risk
The identification and evaluation of emerging risks is derived from the Group's quarterly risk reporting framework. Any new risks reported by the business units are specifically identified and discussed as part of this process, with a formal review of emerging risks at the year end.

How we add value
Our core activities

Fundamental research
Providing solutions to those exploring new frontiers down to the nano and molecular level.
→ Find out more / Pages 38–51

Applied R&D
Our key enabling technologies and solutions facilitate the development of more advanced products.
→ Find out more / Pages 38–51

High-tech manufacturing
Providing products to support today's manufacturing challenges and increase productivity.
→ Find out more / Pages 38–51

Driven by our strategic objectives

01. To create competitive advantage through our customer-centric, market-driven approach
→ Find out more / Pages 34–35
02. To deliver outstanding product solutions supported by innovation and technical leadership
→ Find out more / Pages 34–35
03. To offer value-driven customer service and an unrivalled customer experience
→ Find out more / Pages 34–35
04. To support our performance and our customers by being a highly efficient, resilient and sustainable Group
→ Find out more / Pages 34–35
05. To continue investment in building our capabilities and creating a culture for success
→ Find out more / Pages 34–35

Our operations
Supported by our sectors

Materials & Characterisation
→ Find out more / Pages 40–45

Research & Discovery
→ Find out more / Pages 46–49

Service & Healthcare
→ Find out more / Pages 50–51

Outcomes

Revenue
£444.7m
+14.0% at constant currency

Adjusted operating profit
£80.5m
+13.4% at constant currency

Adjusted EPS
112.7p
+19.5%

Return on capital employed
35.2%
+50 basis points

Underpinned by strong demand for our products and services:

Technology leadership in six end markets with sustainable, structural growth drivers

Customers across commercial (50%) and academic (50%) markets

Global demand with strong positions across Asia (45% of revenue), North America (29% of revenue) and Europe (24% of revenue)

How we invest our capital

Organic cash investment:

- R&D: £34.8m
- Capital expenditure: £32.3m

Shareholder distributions:

- Full-year dividend payments of £10.6m

Balance sheet flexibility for inorganic opportunities:

- Net cash of £100.2m

ENGAGING WITH OUR STAKEHOLDERS

As a customer-focused, market-driven business, our stakeholders are at the heart of everything we do



Encouraging the science leaders of tomorrow

Across the world, a multitude of Oxford Instruments colleagues give their time to mentor developing talent in their local communities and encourage young people to pursue their passion for science and technology. Belfast-based Andor Technology's Engineering Director Claire

Greenwood (above left) recently took part in the SistersIN leadership programme for sixth-form girls in Northern Ireland, mentoring a young woman and providing real-world experience of high-tech design and manufacturing.

Promoting the success of the company for the benefit of all stakeholders

Engagement with our stakeholders allows us to grow and execute our strategy, so we consider the impact we have on them as well as what they consider important when developing our plans for long-term success. We use a range of engagement mechanisms in order to understand and consider our stakeholders' views. In some cases, the Board engages directly with stakeholders, but there is also significant engagement by senior management and throughout the company. The Board receives reports and updates on such engagement and the views and feedback gathered from stakeholders is used to inform discussion and decision-making.

See pages 112 to 117 for details of how we engage with our stakeholders and page 117 for our statement in accordance with Section 172(1) of the Companies Act 2006.



Customers

Customer intimacy helps us to identify additional opportunities to deliver increased value to our customers, and for the long-term growth of our business.



Employees

A high-capability, diverse workforce enables us to better understand our customers and markets.



Shareholders

Generating value for shareholders is part of the Board's fundamental role, alongside promoting the long-term sustainable success of the company and contributing to wider society.



Suppliers

Our supply chain plays a vital role in supporting sustainable growth and efficiency across the business.



Local communities

Our core purpose enables us to support the development of stronger communities and have a positive environmental and social impact.



Society

We are committed to making a positive impact on the world through our solutions and services.

OUR STRATEGY

We made continued progress in the execution of our Horizon strategy in the year, further strengthening our capabilities across the four pillars of our operating model

Many compelling opportunities lie ahead to deliver further value for all our stakeholders as we continue with our strategy, driving sustainable growth and margin enhancement while providing important benefits to society and the environment.

Both the positive impact we make on society and our financial success are underpinned by our Horizon strategy. Built around our purpose to enable a greener, healthier, more connected advanced society, through Horizon, we have positioned ourselves in attractive, global niche markets with strong, structural growth drivers.

We have deliberately focused on building scale and capability in specific end markets, offering sustainable differentiation within advanced materials, life science and semiconductor markets. Horizon has driven engagement with customers across the full technology cycle, from research to applied R&D to high-volume manufacturing, to maximise the impact of and returns from our core enabling technologies, whilst positioning us to benefit from rapid growth and each wave of technology disruption. This embeds resilience into the heart of our business model.

As a customer-centric, market-driven Group, we put our customers at the heart of all we do. Building such close relationships brings us unique insight into the technical and commercial challenges faced by our customers. We then use this insight to inform our product roadmaps to ensure we can offer real solutions both today and in the future.



Market intimacy

To create competitive advantage through our customer-centric, market-driven approach

Our in-depth knowledge and competitive insights about our customers' world allow us to better meet their needs, delivering products and support that will delight our customers, providing added value throughout the relationship.

In the year

Through our commitment to market intimacy, we have strengthened our customer relationships and deepened our understanding of our core markets and the opportunities they present. We have grown our business by anticipating our customers' challenges and responding with a portfolio that helps them achieve their goals. We have also used our enhanced insight to help us grow in adjacent markets and to strengthen our commercial offering.

Year ahead

We will continue to grow our presence in adjacent markets and build our share of commercial customers, while maintaining our position in the academic market. By strengthening our market intimacy capabilities with new talent with specific domain knowledge, we can continue to build more targeted and relevant communications and solutions for our different end markets.



Innovation and product development

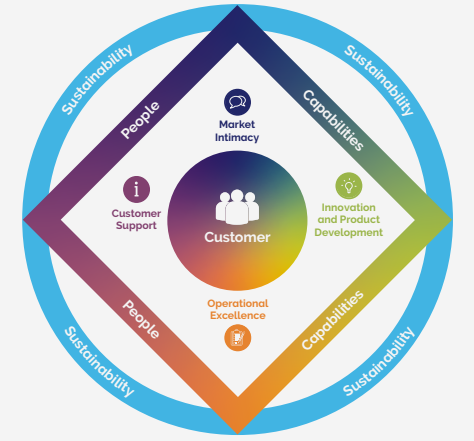
To deliver outstanding product solutions supported by innovation and technical leadership

We focus our R&D investment on creating differentiated products and key enabling technologies for higher-growth markets, prioritising and aligning product roadmaps with market developments and customer needs.

We have continued to integrate our market insight into our product development roadmaps. We have increased our R&D investment to develop new products that will create maximum value for our customers and enable our expansion into adjacent markets. We have maintained our focus on protecting and expanding our intellectual property portfolio to strengthen our barriers to entry.

We will use our understanding of the challenges and opportunities our customers and markets face to steer our investment into the development of solutions that will deliver greater value and returns on our investment. We remain committed to enabling our customers to achieve long-term success and will support them with their environmental agenda by ensuring our products have sustainability designed into them.

See page 8 for Horizon and read more about our progress in our Chief Executive's Review/Pages 20-25



Customer support

To offer value-driven customer service and an unrivalled customer experience

We provide high-quality and high-value customer services, with a compelling portfolio of tailored service products that improve our customers' productivity and the delivery of their outcomes throughout the lifetime use of our products.

We have delivered more service offerings tailored to the specific needs of our customers, applications and regions. Through recruitment and training, we have enhanced our regional services to help us deliver our global expertise locally, and improve lead times for in-person visits. Meanwhile, we have further strengthened our digital offerings, including our remote support capabilities, to ensure maximum uptime for our customers.

We will continue to build our service portfolio to offer solutions for our customers throughout the lifetime use of our products. In parallel with the strengthening of our regional teams for in-person service, we will further enhance our digital offering to provide our customers with an increasing level of real-time insights to enhance their capabilities and productivity.



Operational excellence

To support our performance and our customers by being a highly efficient, resilient and sustainable Group

We invest in operational excellence to drive the continuous improvements across the organisation in procurement, operational efficiency and logistics that will support our performance now and in the future.

The work we have undertaken in previous years to strengthen our supply chain and develop long-term partnerships with fewer suppliers has helped us mitigate the industry-wide supply chain challenges of recent years. We have also embedded and improved manufacturing processes and created centres of excellence to help us achieve the delivery of operational excellence across the Group.

We will continue to make significant investments to facilitate our continued growth. These include Group-wide investments in people, IT and infrastructure to enhance manufacturing productivity, and a focus on building further resilience into our supply chains to minimise potential for disruption. We are also focusing our efforts on embedding environmentally and socially sustainable procurement principles across our operations.



Sustainable culture

To continue investment in building our capabilities and creating a culture for success

We identify and develop the skills and experience that will help us continue to grow and be successful, whilst also offering staff opportunities to help them reach their full potential and feel empowered to own challenges and find solutions for them.

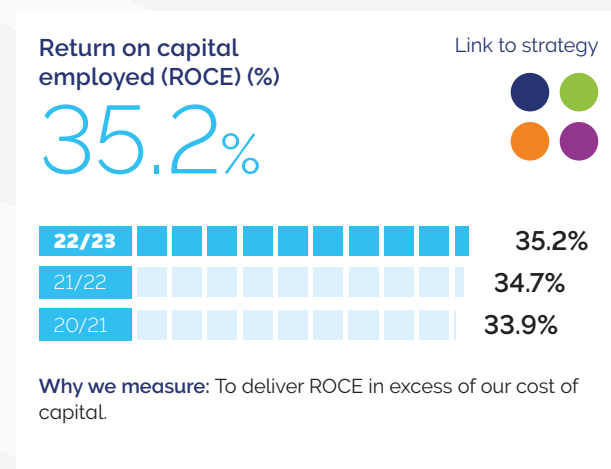
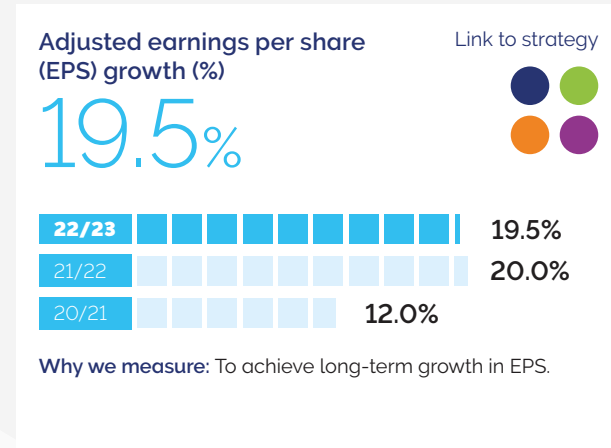
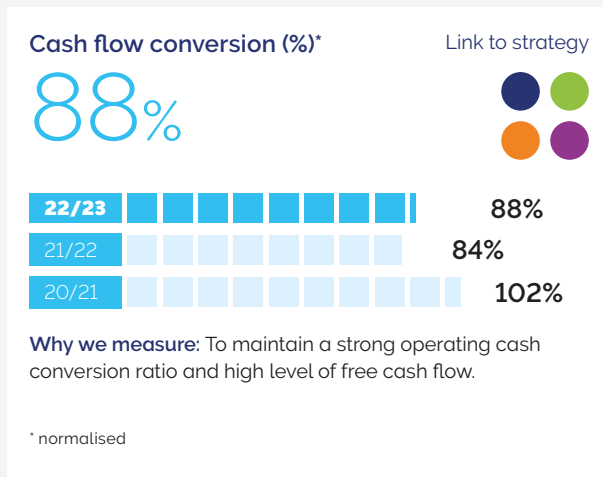
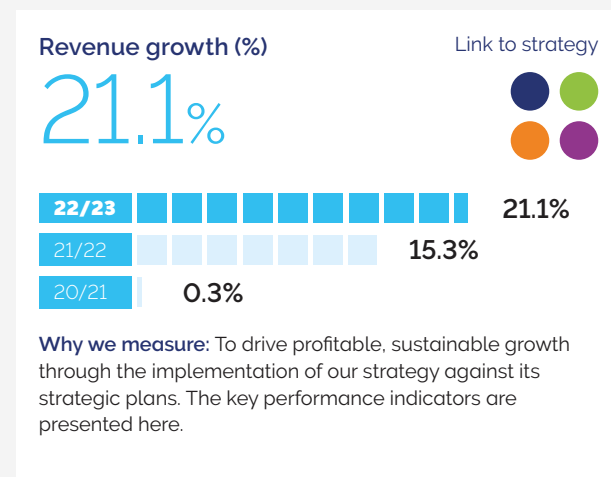
We have continued to provide opportunities for our people to build new skills and broaden their experience, deepening our technical, market and commercial expertise. In the year we have launched Career Pathways, a set of tools and resources to help colleagues develop their careers with Oxford Instruments. We have also extended the number and range of recruits to our apprenticeship schemes and Leadership Programme.

We will continue to enrich our employees' experience of working for Oxford Instruments, creating a safe and vibrant environment. This will include further opportunities to build a successful career here, making a personal, positive impact on the world around us.

KEY PERFORMANCE INDICATORS

The Group uses a range of measures to monitor progress against its strategic plans

Financial KPIs



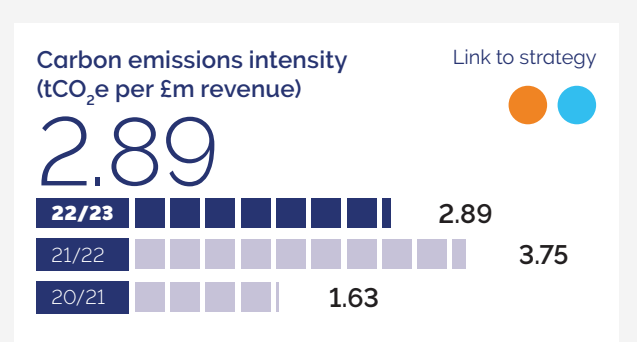
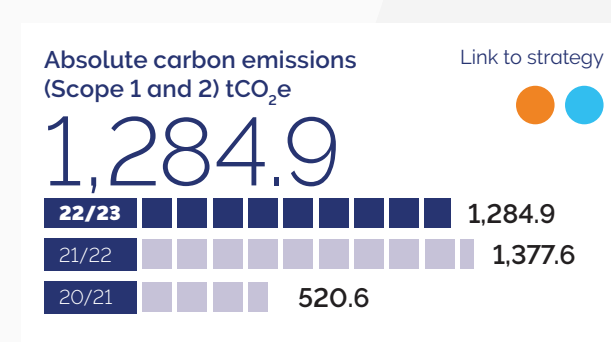
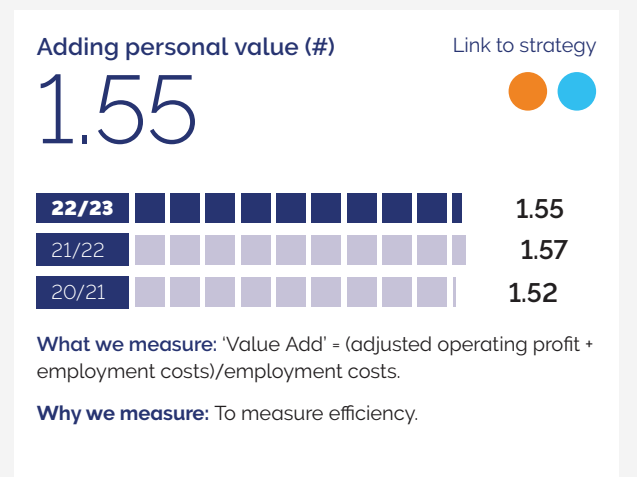
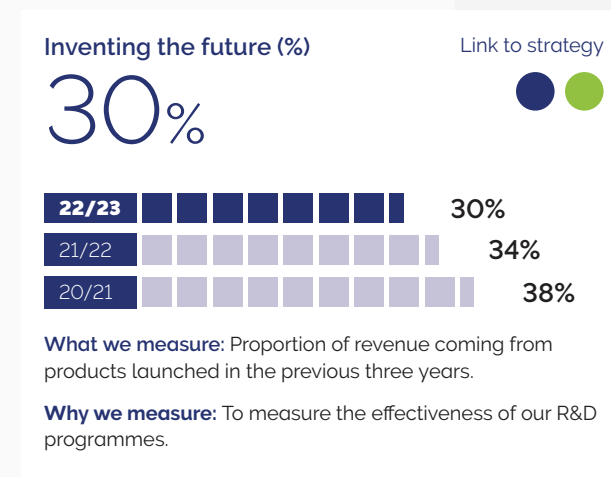
Strategic goals

- Market intimacy
- Customer support
- Operational excellence
- Innovation and product development
- Sustainable culture

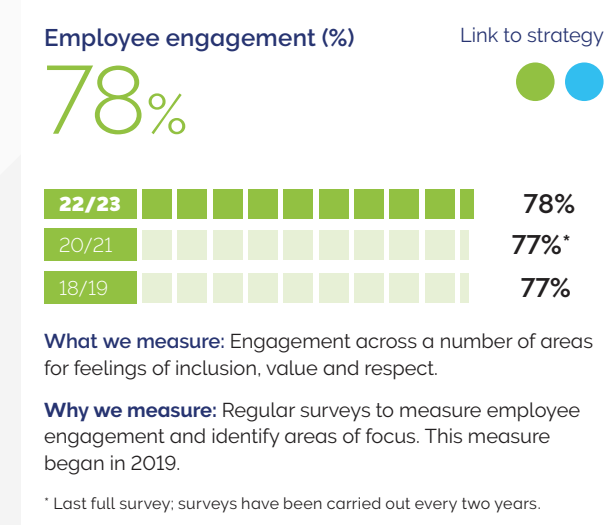
Measuring our performance

Our goal through our financial KPIs is to deliver shareholder returns through profitable, sustainable growth and strong cash conversion and efficient use of capital. The Group uses a range of measures to monitor progress against its strategic plans. The key performance indicators are presented here.

Strategic KPIs



Non-financial KPIs



OPERATIONS REVIEW

Strong progress in the year

The Group performed strongly in the year, with orders, revenue and operating profit growing, and margin in line with the previous year. The Operations Review provides performance headlines at Group level, and more details regarding each of our three sectors: Materials & Characterisation, Research & Discovery, and Service & Healthcare.

Orders intake rose to

£511.6m
an increase of 20.9%

Reported revenue grew to

£444.7m
an increase of 21.1%

Adjusted operating profit grew to

£80.5m
an increase of 21.4%

Group performance – sectors



Materials & Characterisation	+19%*
Research & Discovery	+8%*
Service & Healthcare	+10%*

Materials & Characterisation



Healthcare & Life Science	+13%*
Semiconductor & Communications	+10%*
Quantum Technology	+147%*
Energy & Environment	+18%*
Advanced Materials	+24%*
Research & Fundamental Science	+143%*

Research & Discovery



Healthcare & Life Science	+13%*
Semiconductor & Communications	(6)%*
Quantum Technology	+10%*
Energy & Environment	(5)%*
Advanced Materials	+27%*
Research & Fundamental Science	(29)%*

* Revenue growth over prior year at constant currency

Orders

Orders intake increased 20.9% to £511.6m (2022: £423.1m), representing 14.2% growth on a constant currency basis.

Growing demand supported double-digit order growth from both academic institutions and commercial customers in the year, with strong growth across all three sectors.

There was double-digit order growth in Healthcare & Life Science, Advanced Materials, Semiconductor, Quantum Technology and Energy & Environment markets. Within Semiconductor, orders continued to be robust, with strong growth supported by our focus on compound semiconductor process equipment. Our portfolio also addresses every stage of the semiconductor cycle from research and applied R&D to manufacturing support, providing us with greater resilience, relative to traditional silicon production cycles. There was particularly strong growth in Quantum Technology supported by long-term government funding programmes and our increasing reach into leading commercial companies.

In Research & Fundamental Science, orders were broadly in line with the previous year, as we continued to move away from delivering large, one-off bespoke systems. This market now represents just 3% of orders, due to our managed migration to higher-value markets.

Healthy demand across our regional markets resulted in strong double-digit order growth in Europe and North America, with high single-digit growth in Asia. Within Asia, China had double-digit order growth, after the adverse impact of orders which received export licence refusals, with positive momentum in the fourth quarter as the country moved away from its lockdown strategy.

Revenue

Reported revenue grew by 21.1% to £444.7m (2022: £367.3m), representing growth of 14.0% at constant currency. At constant currency, there was growth of 19.2% in Materials & Characterisation, 8.1% in Research & Discovery and 9.6% in Service & Healthcare, with supply chain issues tempering performance through the year.

The strong revenue growth across our end markets supported 10.0% constant currency revenue growth in Healthcare & Life Science, 24.1% in Quantum Technology, 15.6% in Energy & Environment and 25.2% in Advanced Materials.

Within Semiconductor, supply chain challenges limited the number of compound semiconductor processing systems shipped, resulting in 8.9% constant currency growth – with a book to bill of 1.21 in the year. Research & Fundamental Science was 16.3% lower, as we focus away from this market, with it now representing only 4% of Group revenue.

Revenue by end market

End market	Full year revenue to 31 March 2023	% constant currency ¹ growth	% of Group revenue
Advanced Materials	£140.2m	25.2%	32%
Semiconductor & Communications	£122.0m	8.9%	27%
Healthcare & Life Science	£85.2m	10.0%	19%
Energy & Environment	£43.0m	15.6%	10%
Quantum Technology	£35.3m	24.1%	8%
Research & Fundamental Science	£19.0m	(16.3%)	4%

1. For definition refer to Note on page 3.

OPERATIONS REVIEW

Materials & Characterisation

The Materials & Characterisation sector has a broad customer base across a wide range of applications for:

- The imaging and analysis of materials down to the atomic level (across our Asylum Research, NanoAnalysis, Magnetic Resonance and WITec businesses), where our leading product performance, ease of use and advanced analytics enhance our customers' capabilities, provide actionable insights and increase their productivity. Our portfolio of materials analysis solutions (including X-ray, electron and magnetic resonance analysis systems and atomic force and Raman microscopes) enable the measurement of the structures, composition and critical properties that define the modern world.

- The fabrication of semiconductor devices and structures, where our Plasma Technology business' portfolio of advanced etch and deposition process systems enables our customers to create and manipulate materials with atomic scale accuracy to manufacture advanced compound semiconductor devices.

With a strong focus on accelerating our customers' applied R&D, our products and services in this sector enable the development of new devices and next-generation higher-performing materials, as well as enhancing productivity in advanced manufacturing, quality assurance (QA) and quality control (QC).

Key highlights

	Full year to 31 March 2023	Full year to 31 March 2022	% reported growth	% constant currency ¹ growth
Orders	£272.8m	£219.2m	+24.5%	+18.3%
Revenue	£234.5m	£185.5m	+26.4%	+19.2%
Adjusted ² operating profit	£40.5m	£26.1m	+55.2%	+45.2%
Adjusted ² operating margin	17.3%	14.1%		
Statutory operating profit	£35.7m	£20.8m		
Statutory operating margin	15.2%	11.2%		

1. For definition refer to Note on page 3.

2. Details of adjusting items can be found in Note 2 to the full-year financial statements.

Advancing customers' progress across a wide range of applications in fundamental research, applied R&D and manufacturing



The Materials & Characterisation sector delivered strong constant currency order growth of 18.3% to £272.8m (2022: £219.2m), with constant currency revenue increasing 19.2% to £234.5m (2022: £185.5m). This was underpinned by strong customer demand across our markets, aligned with the leading-edge technology and ease-of-use features within our portfolio. There was particularly strong growth into our largest markets – advanced materials, semiconductor and energy & environment – which together accounted for 90% of the sector's revenue.



"We increasingly see customers deploying a wide range of our products and techniques to accelerate their progress."

Ian Wilcock
Managing Director
Oxford Instruments Materials
Analysis Group



We also saw growth into our healthcare and quantum markets within Materials & Characterisation, albeit the majority of our activity in these markets stems from our Research & Discovery sector (see pages 46 to 49). As a result of the strong order intake, our Materials & Characterisation order book increased by 34.5% to £156.0m at the year-end (2022: £116.0m), representing growth on a constant currency basis of 29.6%.

Our strong revenue growth, combined with leveraging efficiencies across our teams and portfolio, resulted in significant growth in adjusted operating profit, which increased by 45.2% at constant currency to £40.5m (2022: £26.1m). This was supported by price rises flowing through into second half deliveries, better compensating for the inflationary pressures in the year. There was a 320bps increase in the adjusted operating margin to 17.3% (2022: 14.1%) despite continued investment for future growth.

Operational, strategic and regional progress

During the year, we have continued to maximise synergies across our portfolio of materials analysis solutions by leveraging our market insights and in-depth knowledge of customers' workflows. This enables us to offer an ever-broader range of tailored solutions to existing customers, as well as expanding into larger, faster-growing markets. We increasingly see both existing and new customers deploying a range of our products and techniques to accelerate their progress and manage the quality of their output at every stage from R&D to manufacturing. This approach has enabled us to support the growth of WITec, extending its reach into new geographies and markets, while in turn, WITec's ability to measure the structural chemistry of materials has complemented our existing portfolio, enabling us to provide solutions that fully characterise the critical parameters of materials, systems and devices at the nanoscale.

→ FURTHER READING

For a snapshot of our progress, see At a glance / **Pages 6–7**

For more on our strategic and operational progress, see Chief Executive's Review / **Pages 20–25**

For more on our financial performance, see Finance Review / **Pages 82–93**

OPERATIONS REVIEW: MATERIALS & CHARACTERISATION continued

We continue to maximise synergies across our portfolio by leveraging our market insights and in-depth knowledge of customers' portfolios

Our investment in regional sales teams and heightened application focus through our nurture, expand and land strategy has driven particularly strong growth in North America and Europe, as well as growth in Asia.

Within China, we had strong order growth, and revenue growth of 6% in the year was supported by the easing of Covid-related lockdowns in the second half of the year, despite ongoing delays in receiving export licences and an increased number of refusals.

We have delivered continued growth to both academic and commercial customers, with commercial customers representing 58% of revenue in the year (2022: 57%). Strong growth into academia was supported by increased government funding into our markets as they prioritise the development of semiconductor infrastructure, invest in greener technologies, and advance their national quantum programmes.

Our own production capacity to support the growing compound semiconductor market will significantly increase with the move of our Plasma Technology business, based in Bristol, UK, into purpose-built, larger premises later in the current financial year. Comprising a state-of-the-art manufacturing area, with increased clean-room space and advanced laboratories, it will support further development of our leading-edge technologies in the surging compound semiconductor market.

With good positions in a number of our end markets, the most notable developments for Materials & Characterisation in year are in the following:

Semiconductor & Communications (42% of revenue)

Semiconductor & Communications has delivered strong growth in both orders and revenue. We have a broad reach across both the emerging compound semiconductor market (representing c. 65% of semiconductor revenue in the year) with its strong environmental and critical communication growth drivers, and the more established silicon chip and electronic device market. Within these markets, we provide solutions to support fundamental developments, applied R&D and, increasingly, solutions for manufacturing-related applications. This breadth of application provides us with a level of protection from the cyclicity of the semiconductor market, as, for example, R&D investment typically increases during periods of lower production.

With governments including the US, Europe and Japan committing tens of billions of pounds across the semiconductor market over a five-to ten-year period, and significant investment by companies, we have seen increased growth into research facilities and specialist clean rooms, as they seek to enhance their regional capabilities and safeguard security of supply. This has led to growth across our portfolio in these regions.

In the compound semiconductor market, we are seeing increasing demand driven by a number of factors, including the rise in digital data flow, increasing requirements from hyperscale data centres, surging demand for connectivity, the requirement for more energy-efficient devices and the increased deployment of human-machine interfaces such as facial recognition.

Supported by targeted new developments and product launches across our portfolio, our systems are enabling the significant increases in performance and yield, and the reductions in production cost, needed to make the transition to compound semiconductors economically viable. For example, in gallium nitride devices for improved power efficiency, our solution enables etch control to a uniformity of half a nanometre – just a few atoms thick. This results in a four-fold improvement in manufacturing volumes, together with enhanced performance.

With proprietary expertise across a wide range of compound semiconductors, including indium phosphide and silicon carbide as well as gallium nitride, our systems are being used in a broad range of important applications:

- supporting the delivery of 5G connectivity to everyone, everywhere in the world, via communication networks and data communications centres – for example, scaling up to support the processing needs of autonomous cars, which are expected to require up to 20 terabytes of data an hour;



- augmented reality applications, including micro LEDs and 3D sensors, which are increasingly being deployed across phones, cameras and cars;
- proximity sensors in smartphones, in applications such as facial recognition and contactless payment, where their premium performance is key; and
- critical yield and performance in power semiconductors for consumer electronics, such as USB-C fast chargers and truly wireless charging.



"It's rewarding to be at the heart of the semiconductor developments powering the higher-performing, greener technologies of today and tomorrow."

Matt Kelly
Managing Director
Oxford Instruments Plasma Technology



Alongside growth in our compound semiconductor portfolio, we saw growth in our imaging and analysis products. These are being used extensively across the silicon semiconductor chip industry, supporting production and development of next generation devices which deliver unparalleled performance and productivity. Through the year we have seen a reduction in orders and revenue for our equipment and techniques used directly in manufacturing defect review for consumer electronics. However, due to our leading analytical performance, combined with manufacturers ramping up to develop the next generation of chips – including 1- to 3-nanometre nodes – we have seen a significant increase in orders and revenue for applied R&D applications, demonstrating the resilience afforded by our positioning across the technology lifecycle. This has been supported by product launches of dedicated solutions for our semiconductor customers for advanced characterisation at the nanoscale for increasingly complex architecture – which is ever more important as chips and devices continue to shrink in size.

In addition, our imaging and analysis products are deployed across the broader electronics market, including the development and production of printed circuit boards and standard electronic components such as resistors and capacitors.

Advanced Materials (34% of revenue)

Advanced materials play an increasingly important role in our daily lives, enabling everything from the screens we watch and the cars we drive to the structural materials that build our cities. We have delivered very strong double-digit order and revenue growth in this market, as both academic and commercial customers use our equipment and techniques to develop and deploy higher-performing and more sustainable materials, products and modes of transport, in pursuit of a greener future. We have seen particularly strong growth into service laboratories and core facilities, where the capabilities, versatility, and ease of use of our equipment and software lend themselves to a wide range of applications.

With nearly all materials and products undergoing some form of analysis, this continues to drive increasing demand across our imaging and analysis systems.

OPERATIONS REVIEW: MATERIALS & CHARACTERISATION continued

Our systems allow our customers to measure and characterise down to the nanoscale, optimising performance and production

Our systems allow our customers to measure down to the nanoscale, optimising the performance and production of lighter, stronger, higher-functioning materials from early-stage research through to design and production.

In the year, we have seen strong growth in the analysis of structural materials such as steel and concrete, which together account for around 15% of global CO₂ emissions. Here, we are accelerating our customers' progress as they address the vital challenge of making greener alternatives without compromising the performance of the material. Examples include the development of low-emission concrete recipes and self-healing concretes which can repair cracking automatically. In metals, our products support the development of new, low-carbon steels, and the recycling of valuable materials such as aluminium for use in high-end applications including aerospace, as part of the global push towards a circular economy.

In addition, we have seen related growth into automotive and aerospace applications, as structures evolve to facilitate renewable power sources such as the large, heavy battery packs currently needed in EVs.

The precision of our equipment also enables our products to support the development and characterisation of so-called 2D materials such as graphene, which are just one atom thick and have unprecedented performance properties. Graphene is starting to make its way into mainstream products including smartphones and wearable devices as scientists and researchers learn how to harness its capabilities. Other 2D materials are being used in areas such as battery research, displays and next-generation semiconductors, where their electrical properties are being explored for their potential to enhance performance.

Our products – particularly our atomic force microscopes – also play a crucial role in helping scientists understand the properties of polymers, including viscosity, adhesion, strength and hardness. The integral role polymers play in a multitude of products used in daily life, from tyres to fabrics and medical implants, underpins our growth in this area.

Energy & Environment (14% of revenue)

From battery research to water quality, our systems play a critical part in the development of a greener future as governments, universities and commercial customers all over the world seek to reduce negative environmental impacts and drive positive change.

A particular area of strength for us is the battery market, which has a key role to play in the transition from fossil fuels, enabling sustainable travel and providing efficient and affordable storage to complement renewable energy generation. With our increasingly tailored solutions, which extend across our materials and analysis portfolio, we enable our customers to address challenges in every stage of the battery life cycle, from raw materials and R&D through to quality control and failure analysis, and end-of-life recycling. An example of this is our recently launched Cypher Battery Edition atomic force microscope, configured to enable the safe direct observation of battery chemistry during operation.

We enable our customers to address challenges in every stage of the battery life cycle



With the active elements of a battery operating at the nanoscale, our products help researchers better understand the fundamental chemistry and mechanisms that affect battery capacity, charging rate and lifetime. Our solutions are also adopted to ensure quality control, including particle analysis to detect potentially harmful contamination within raw materials.

Our analysis solutions are also playing an increasing role in the quest for a cleaner, less polluted environment. Customers, including a major European marine science institute, are using our systems to map the type and volume of microplastics across the oceans – crucial in helping our understanding of the impact of these pollutants on the wider ecosystem. Here, our leading Raman microscopy system, combined with our Particle Scout software, enables the categorisation and counting of microplastics and industrial waste.

Elsewhere in our portfolio, our benchtop Magnetic Resonance analysers provide a user-friendly interface to assess the levels of fats, oils and grease in wastewater, helping to prevent the fatbergs and pollution incidents which can occur when these build up in sewer networks.

Healthcare & Life Science (6% revenue)

Healthcare & Life Science has delivered good growth through the year. Customers are using our atomic force and Raman microscopy equipment to explore biological systems, with applications in cancer and heart disease, among many others. This includes the imaging of living cells to measure their elasticity, structure and the dynamics of DNA, which are used to discriminate between healthy and diseased tissue.

Quantum Technology (3% of revenue)

With strong customer relationships across the quantum market, and expertise in semiconductor processing and characterisation, we are seeing increasing demand to support fabrication of the qubits which form the basis of quantum computers. Our systems are supporting the roadmap to develop quantum computers with higher numbers of qubits, and greatly reduced defects. This will be critical for the advancement of these transformational devices.

OPERATIONS REVIEW

Research & Discovery

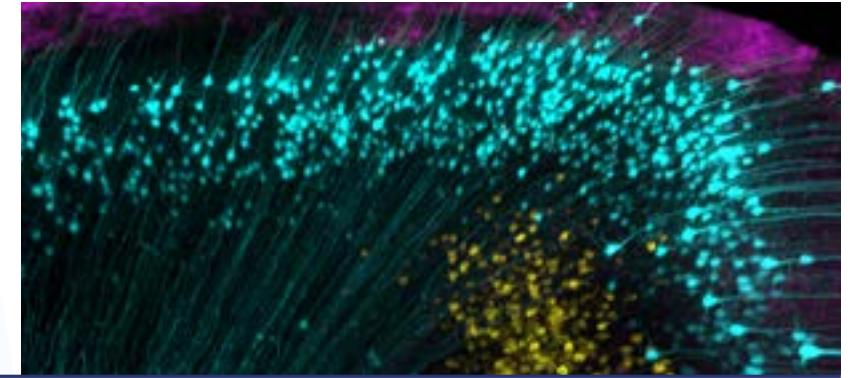
The sector comprises our Andor Technology, NanoScience and X-Ray Technology businesses. It provides advanced solutions and unique environments that enable imaging and analytical measurements down to the atomic and molecular level, as well as ultra-low temperature and high magnetic field environments.

These are used across scientific research and applied R&D, and commercial applications. Our leading-edge technologies have a key role to play across a range of fields, from accelerating developments in medicine and material science to facilitating the growing commercialisation of quantum technology.

Key highlights

	Full year to 31 March 2023	Full year to 31 March 2022	% reported growth	% constant currency ¹ growth vs full year to 31 March 2022
Orders	£160.4m	£133.9m	+19.8%	11.6%
Revenue	£139.4m	£120.3m	+15.9%	8.1%
Adjusted ² operating profit	£18.0m	£21.3m	(15.5%)	(21.1%)
Adjusted ² operating margin	12.9%	17.7%		
Statutory operating profit	£11.3m	£15.0m		
Statutory operating margin	8.1%	12.5%		

1. For definition refer to Note on page 3.
2. Details of adjusting items can be found in Note 2 to the full-year financial statements.



Our advanced solutions and unique environments enable imaging and analytical measurements down to the atomic and molecular scale

Increasing demand for our key enabling technologies, particularly across our Quantum Technology and Healthcare & Life Science markets, drove strong order growth of 19.8% to £160.4m (2022: £133.9m), with momentum building through the second half of the year. In addition, there was strong revenue growth of 15.9% to £139.4m (2022: £120.3m). In scientific camera and microscopy products, this was aided by the easing of supply chain pressures and relaxation of China's lockdown restrictions in the second half. However, for our high-value cryogenic and magnet systems, unfavourable phasing of installations

"We are delivering transformational performance to accelerate the development of new treatments and therapies."

Kristian Laskey
Managing Director
Oxford Instruments Andor Technology



(the point at which revenue is recognised for these products) resulted in lower revenue in the year, despite higher production volumes and strong order growth.

Adjusted operating profit at £18.0m (2022: £21.3m) was lower than last year. This was due to increased investment in people and processes in our scientific camera and microscopy business as we increase production capacity and operational effectiveness. In addition, profit was impacted by the lower revenue in the cryogenics and magnets business as well as an unfavourable mix in this business from the installation of the last of the legacy complex bespoke systems. The lower adjusted operating margin of 12.9% (2022: 17.7%) reflected these factors.

Solid progress in the year

In the period we continued to focus on the key markets for the sector, namely Healthcare & Life Science, Advanced Materials and the evolving Quantum Technology market. The sector has a high profile within the research-intensive academic market, with a high proportion of sales made to academic customers. However, sales to commercial customers represent a growing proportion of revenue, at 33% (2022: 26%), as we develop application-specific, easy-to-use solutions based on our high-end, research-oriented platforms. In addition to selling directly to end customers, where we have a strong brand presence, we also access a broad range of other end markets

by providing key technologies to a growing portfolio of strategic original equipment manufacturer (OEM) partners.

Supply chain challenges, lockdowns in China and extended delays in obtaining UK export licences had a disproportionate impact on the sector in the first half. However, the easing of supply chain constraints and the lifting of Covid restrictions in China supported a strong second half, resulting in double-digit order and revenue growth. This included significant order growth across our cryogenic platforms for quantum computing and our optical microscopy Healthcare & Life Science portfolio, underpinned by increased demand and new product launches in the year. This resulted in an increased orderbook of £119.2m (2022: £108.7m), up 9.7%, and a book-to-bill ratio of 1.15.

FURTHER READING

- For a snapshot of our progress, see At a glance / **Pages 6-7**
- For more on our operational and strategic progress, see Chief Executive Review / **Pages 20-25**
- For more on our financial performance, see Finance Review / **Pages 82-93**

OPERATIONS REVIEW: RESEARCH & DISCOVERY continued

We have seen continued strong momentum for our advanced microscopy solutions and dedicated analytical software

Investment from government and commercial customers in Europe and the US has more than offset a significant reduction in academic orders from China related to the quantum and astronomy markets, as we move our focus towards markets with fewer export licence restrictions. China now represents a smaller proportion of revenue for the sector at 18% (2022: 25%), with significant growth into North America, which now represents 37% (2022: 33%) of revenue.

The sector has good positions in a number of end markets, and developments are as follows:

Healthcare & Life Science (39% of revenue)

We have seen continued strong momentum throughout the year for our advanced microscopy solutions and dedicated analytical software. We have enabled academic researchers, scientists and pharmaceutical companies to accelerate progress towards a healthier society, delivering improved treatments for neurological diseases and cancers, and towards the eradication of diseases such as malaria and polio. The significant progress in these fields is being enabled by our advanced microscopy solutions which support the improved understanding of fundamental disease mechanisms. With our enhanced product range of advanced microscopy products, we now enable fast, repeatable imaging of large molecular and cellular samples with the highest possible

resolution for the ultimate research capability, whilst expanding the addressable market by bringing research-grade capability to broader and much larger markets through our disruptive, easy-to-use benchtop platform. This has supported double-digit order growth, with enthusiastic market acceptance of our new BC43 benchtop microscope, frequently bought by core imaging facilities as a user-friendly, space-saving workhorse to increase productivity at an attractive price point. It has shown strong growth in cancer research and neuroscience applications, such as studies into Alzheimer's disease and other forms of dementia, enabling researchers and pharmaceutical companies to look at the impact of new medicines and treatments. We also received our first OEM order for multiple BC43 systems for incorporation into a high-throughput gene sequencing instrument.

We have also seen significant order growth for our high-end Dragonfly microscopy system, supported by the launch of a new model with super spatial resolution capability. Dragonfly is being used in areas including spatial genomics, a method for mapping cancer markers rapidly to accelerate therapeutic breakthroughs, with its high speed a particular benefit to researchers.

Our proprietary AI-powered analytical software packages can be used across our portfolio, and with other manufacturers' equipment. These enable the automated analysis and interpretation of increasingly rich data sets, with

sales of tailored packages for neuroscience, cancer research and cell biology applications growing strongly in the year. In addition to our microscopy portfolio, we continued to see increasing demand and strong revenue growth for our scientific cameras and laser modules through OEM partners in fields including drug discovery and gene sequencing.

Advanced Materials (28% of revenue)

Demand for our material characterisation technologies – such as our advanced measurement systems which integrate our superconducting magnets and cryogenic systems, as well as our portfolio of scientific cameras and optical spectrometers – continues to be driven by interest in new material discoveries aligned to global mega trends. Despite supply chain issues which eased in the second half, we continue to see significant growth in sales for technologies which enable fundamental material characterisation.

Research & Fundamental Science (10% of revenue)

We continue to see long-term customer interest in our high-end scientific cameras and specialised cryogenic and superconducting magnet systems across a broad range of research themes including astronomy, chemistry and physics research. In fluids and plasma dynamics, our scientific cameras and spectrometers, with their highly

We are at the heart of global research and development in the dynamic and growing field of quantum technology



sensitive and ultrafast detectors, enable customers to analyse phenomena on timescales as low as a billionth of a second. These are being used to study the efficiency of combustion processes in jet engines as new environmental fuels are developed, as well as exploring the critical behaviour of plasmas used to generate nuclear fusion, the ultimate solution to clean and sustainable energy. Our products continue to support the leading edge of science, with customers of our Andor camera and microscopy equipment named as winners of the 2022 Nobel prizes for chemistry and physics.



"As quantum applications develop, we are seeing increased academic and commercial opportunities for our technologies."

Matt Martin
Managing Director
Oxford Instruments NanoScience



We are increasingly focusing on larger and more profitable markets, with reduced focus on bespoke, one-off complex systems, particularly to academia. As a result of a controlled move away from these systems, orders and revenue in Research & Fundamental Science were down in the year.

Quantum Technology (18% of revenue)

Oxford Instruments is at the heart of global research and development in this dynamic and growing market, which is receiving increased funding as both governments and commercial players seek to deliver the vast potential of quantum technology.

During the year, all major governments announced quantum technology funding programmes – with the UK government, for example, committing to a £2.5 billion investment over the next 10 years. In addition, global technology and communication companies, and a range of innovative smaller players, are breaking new boundaries as they create ever-more powerful quantum computers which are starting to move out of the laboratory and into mainstream applications.

We are collaborating with many of the sector's key academic and, increasingly, commercial institutions to accelerate progress towards the adoption of quantum computers as a mainstream tool. Quantum has the potential to transform our ability to solve incredibly complex problems which are beyond today's

capabilities, disrupting existing markets such as finance, logistics, drug discovery and chemistry. Our technology and service capabilities are supporting these customers as they transition from the research laboratory into commercial data centres, enabling the transformation of established end markets as datacentres start to provide quantum computing services direct to customers, undertaking application trials on real-world data.

With multiple quantum computing technologies still in trial, the superconducting techniques which require cryogenic technologies still dominate the use cases. Over the course of the year, we have seen significant orders from tier 1 quantum providers, investing in our cryogenic products as they increase their engineering programmes to build 1,000 qubit-plus systems. However, our unique position, supporting both cryogenic quantum environments and optics-based quantum communication, through our scientific cameras, puts us at the heart of multiple strands of this rapidly growing market. Our highly sensitive, photon-counting camera remains the leading imaging solution in quantum optics experiments involving trapped ion and quantum entanglement measurements.

Within our Semiconductor & Communications and Energy & Environment end markets (together representing 6% of revenue), we continued to see strong demand for our key technologies, with revenue broadly in line with the previous year.

OPERATIONS REVIEW

Service & Healthcare

The Service & Healthcare sector comprises the Group's service and support related to Oxford Instruments' own products, and the support and service of third-party MRI scanners in Japan. We offer tailored support packages for all our products, delivered by a global network of product experts, application experts and service engineers, both in person and via digital channels, including online training, webinars and remote service support.

Key highlights

	Full year to 31 March 2023	Full year to 31 March 2022	% reported growth	% constant currency ¹ growth
Orders	£78.4m	£70.0m	+12.0%	+6.4%
Revenue	£70.8m	£61.5m	+15.1%	+9.6%
Adjusted ² operating profit	£22.0m	£18.9m	+16.4%	+8.5%
Adjusted ² operating margin	31.1%	30.7%		
Statutory operating profit	£22.4m	£18.9m		
Statutory operating margin	31.6%	30.7%		

1. For definition refer to Note on page 3.

2. Details of adjusting items can be found in Note 2 to the full-year financial statements.

There was good growth in orders which increased 6.4% at constant currency to £78.4m (2022: £70.0m). Revenue growth was strong, increasing by 9.6% at constant currency to £70.8m (2022: £61.5m). Growth in orders and revenue in North America and Europe was strong but slightly lower than the prior year in Asia, which was adversely impacted by first half Covid-related restrictions in the region. There was strong growth momentum in the second half, as restrictions eased.

Adjusted operating profit increased 8.5% at constant currency to £22.0m (2022: £18.9m) reflecting the increased revenue, but partially offset by the investment in expanding our

global service teams and lower revenues from Asia. This investment in the Service & Healthcare offering resulted in the adjusted operating margin decreasing by 30bps at constant currency to 31.1% (2022: 30.7%).

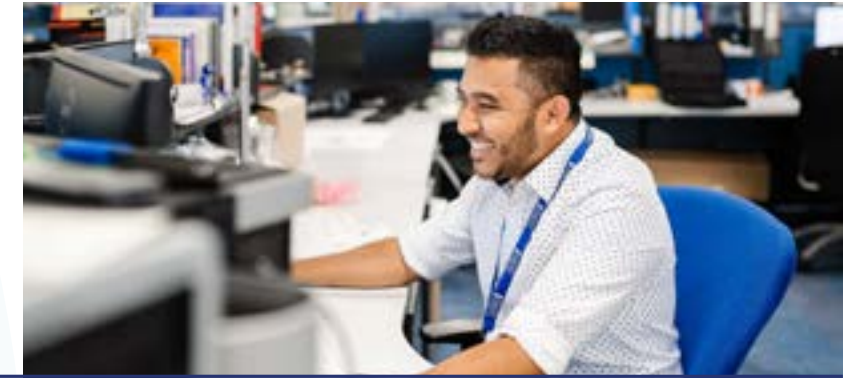
➔ FURTHER READING

For a snapshot of our progress, see At a glance / **Pages 6–7**

For more on our operational and strategic progress, see Chief Executive Review / **Pages 20–25**

For more on our financial performance, see Finance Review / **Pages 82–93**

We offer tailored support packages for all our products, delivered in person and digitally by expert teams all over the world



Operational and strategic progress

Our service and support strategy, underpinned by Horizon, is focused on three key pillars:

- increased tailoring of our service offerings to specific end applications and customer types;
- the delivery of seamless customer service at every stage of the product life cycle; and
- the development of global processes which can be delivered via a hybrid approach, both in region and digitally.



“Our investment in both digital and in-person services across the world has put us on a strong upward trajectory in Service & Healthcare.”

Vicki Potter
Chief Human Resources Officer
and Services Director



As we increase our portfolio and the scope of our services, we are offering a range of support packages to match the needs and budgets of our customers. This allows our customers to maximise their capabilities, enhance their productivity and receive immediate help and support when needed throughout the lifetime of our systems. We use our market intimacy to develop products appropriate to each end application and customer type. These include tailored offerings across our life science microscopy portfolio, where we are increasingly securing point of sale service contracts for our benchtop systems. We are also seeing strong growth in our Imaris life science analytical software, with packages focused on cancer research, cell biology, neuroscience and core facilities available on annual licences.

As the quantum market evolves into the commercial arena, we have secured a number of contracts from commercial customers to provide 24/7 service capability and uptime to quantum computers situated in hyperscale datacentres. This requires a dedicated team and approach building on our experience in providing similar service capability to MRI imaging systems and provides a good growth opportunity going forward.

In pursuit of seamless customer service, we have continued to invest in extending our regional teams and spares capacity to ensure short lead times for in-person support and training visits, as well as continuing to develop our digital and remote support offerings. We are increasingly able to diagnose and resolve issues

within a few hours, using virtual reality as part of our digital toolkit, and in many cases removing the need for engineers to make site visits. Together, these developments result in greater flexibility and convenience for customers and a more sustainable offering, helping to limit our carbon footprint from business travel.

We have also continued to focus on the third element of our strategy, developing standard techniques and processes globally which are implemented locally through our combined regional teams, with teams increasingly trained to service multiple products. The benefits of this approach include cost efficiencies from best-practice procedures, deeper local customer intimacy and improved response times.

The ongoing transformation of our approach to customer service and support has increased the proportion of revenue from commercial customers, who now represent 58% of our customer base in this sector. Regionally, our increased investment in local teams in North America and Europe has supported strong growth in both orders and revenue to these geographies.

Our servicing of third-party MRI imaging equipment in Japan continues to deliver excellent levels of service and support to our customer base, and revenue was broadly in line with the previous year.

The Service & Healthcare sector remains on a strong upward trajectory, with significant ongoing opportunities to support revenue growth and margin expansion.

SUSTAINABILITY

Sustainability

is central to Oxford Instruments, with our **purpose**, values, strategy and chosen end markets all aligning around the **positive impact** we seek to make on our planet and our stakeholders

Through our products and services, we are working to enable a greener, healthier, more connected advanced society. And through our commitment to operating responsibly, in line with our values, we strive to be a good citizen of the planet.

We take a holistic approach to sustainability, ensuring that it is embedded throughout the organisation, from our Board-level Sustainability Committee, on which all Board members sit, to our whole workforce around the world. We also seek to embed principles of sustainability in our interactions with all stakeholders, including customers, supply chain partners and our local communities. In order to align with our ambition to be a leading organisation in the area of sustainability, and adhere to our principles, we focus on the following areas: environment, social and governance (ESG).

Taking the right actions on sustainability at all levels is critical for us to create the value and positive impact we seek to achieve, and we are committed to building on past progress and continuing to challenge ourselves to go further. We are currently focusing on six strategic initiatives to effect change in our organisation – progress to net zero; environmental impact; operating responsibly; sustainable product stewardship; inclusive culture; and community and connection. These strategic initiatives are underpinned by the ongoing foundations of responsible business which guide our ways of working: environmental progress; ethical business

practices; regulatory and financial compliance; health and safety; investing in our people; and culture and engagement. We set out our progress against our ESG strategy throughout this section.

At a global level, the United Nations Sustainable Development Goals provide an ambitious and powerful framework for companies and other organisations to focus their efforts and commitments. We fully support all 17 goals, but have focused our efforts around those goals where we feel most able to have a positive impact.

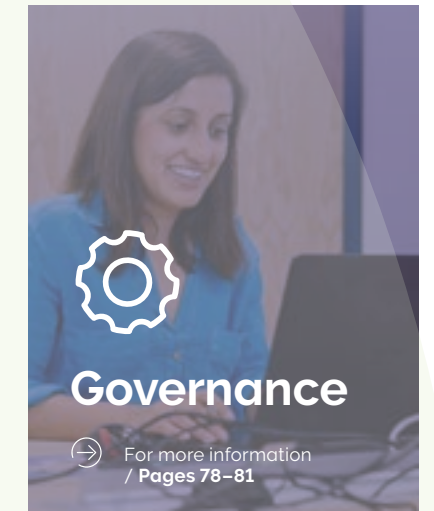
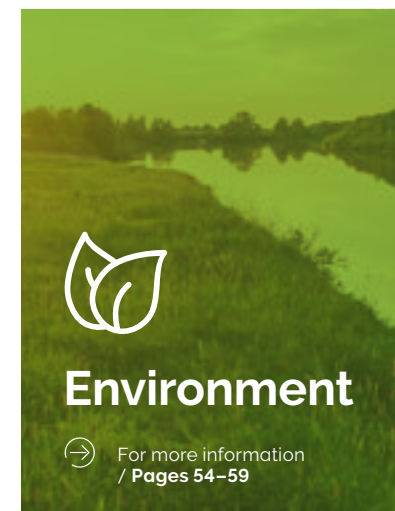
Our products contribute toward the following goals:



The way we run our business and the actions we take throughout our value chain support the following goals:



In order to align with our ambition to be a leading organisation in the area of sustainability, and to adhere to our principles, we focus on the following areas:



“We will continue to strive to expand both our reporting and the extent and detail of our sustainability targets, in line with our purpose and values.”

Sir Nigel Sheinwald
Non-Executive Director and Chair of the Sustainability Committee

Introduction

We are committed to continuing and, where we can, accelerating our positive progress on sustainability each year. A particular area of focus has been the development of our new, ambitious and evidence-based net zero target of 2045, together with interim targets to 2030 for the reduction of our Scope 1 and 2 emissions. Our next steps include setting out the detail of our roadmap to net zero, developing interim targets for our Scope 3 emissions, and assessing the progress made towards our goals. For more detail, see pages 54 to 59.

We have also focused on the social and governance elements of our sustainability agenda. In particular, we continue to strive for equality, diversity and inclusion, and this year have launched new employee impact groups focused on race and ethnicity, and LGBTQ+ issues. For more on our people and governance-centred initiatives, see pages 72 to 81.

Remuneration structures are a key tool to drive sustainability-focused behaviours and positive impacts. This year, the Sustainability Committee and Remuneration Committee have joined forces to devise new sustainability-related performance measures for Executive Directors, which will be implemented in FY23/24. For further information, see the Directors' Remuneration Report on pages 144 to 173.

As Sir Nigel Sheinwald, Chair of our Sustainability Committee, learned when he joined employees to discuss sustainability, there is widespread support across Oxford Instruments to progress our sustainability agenda across a range of initiatives, from reducing our CO₂ emissions to reconsidering energy usage, and achieving greater ethnic diversity in our workforce. You can read about our progress in 2022/23 throughout this Sustainability Report – and we look forward to going even further in 2023/24.

SUSTAINABILITY: ENVIRONMENT

Whilst we are proud
of the positive impact
our products make in the world,
including their key role in supporting a
technology pathway to decarbonisation,
we are committed
to continuing to minimise our own
environmental footprint



Strategy and targets

With our intention to enable a greener society enshrined in our purpose, we have proactively reduced our own environmental footprint over many years. We embarked on our environmental journey in the early 2000s, with the creation of our employee-led Go Green teams; since then, we have dramatically reduced our carbon footprint, leaving only a relatively small footprint in our own operations. Today, our carbon intensity metric for Scopes 1 and 2 stands at 2.89 tonnes per £million revenue – a reduction of 66% versus the 8.5 tonnes per £million intensity ratio for 2019, our baseline year.

23%

reduction in tCO₂e per £million revenue versus 2021/22

6.7%

reduction in tCO₂e emissions versus 2021/22

0.62

tCO₂e per full-time employee (FTE) versus 0.76 tCO₂e per FTE in 2021/22

This year, supported by an in-depth analysis of the components of our emissions footprint, we have taken the significant step of setting new, more ambitious but achievable net zero carbon targets for Oxford Instruments. We are now committed to reaching net zero by 2045 in our own operations (Scopes 1 and 2) and across our supply chain and the use of our products (Scope 3). We will continue to review this ambition and the opportunities that arise as technology becomes more advanced, bringing this date forward if we possibly can. This stretching goal puts us five years ahead of the UK Government's commitment.

As part of our journey to net zero, we are setting challenging medium-term targets of a 50% reduction in Scope 1 emissions and a 70% reduction in Scope 2 emissions, both calculated versus our 2018/19 baseline year,

and set to be achieved by 2030. We have set these targets in alignment with the Science Based Targets initiative (SBTi)'s 'well below 2°C' framework, pursuing the 'higher' ambition pathway, rather than the less challenging 'required' pathway. We will now formally submit them to SBTi for verification, approval and official publication. We will report on a market basis (reflecting the specific energy sources we use) where we can, and a location basis (reflecting the average emissions intensity of the grid) where this is not feasible.

The approach that we have taken in setting our targets combines ambition with a foundation rooted in an accepted process, and real-world data. As a company founded on scientific endeavour, we believe in the power of innovation to overcome

the challenges faced by our supply chain, the source of most of our Scope 3 emissions. We are actively engaging with our suppliers and customers to seek to understand their routes to net zero (see case study below), and to work with our external sustainability advisers to consider the likely 'greening' timetable of key components. We will use what we learn to set an ambitious but achievable medium-term Scope 3 target in the coming year.

Through this process we have also incorporated sustainability considerations into our new product development stage gate process, to ensure the ongoing reduction of the carbon footprint of our products through energy use, packaging and distribution, as well as increased recyclability and upgradability.

CASE STUDY

Engaging with
our supply chain

As with most manufacturing businesses, Scope 3 emissions (those derived from the products and services we purchase, and the use of our products by our customers) constitute the majority of our carbon footprint (98% of the total in 2021/22, when our most recent full Scope 3 assessment was undertaken). Working with our suppliers is therefore critical in order to understand, and then make an active plan to reduce, our Scope 3 emissions. In October 2022, our Chief Executive wrote to the suppliers who represent 80% of our Scope 3 footprint, to open a dialogue about our shared paths to net zero. The ongoing dialogue and information being provided is allowing us to better understand the maturity of environmental commitments across our supply base, and to build a detailed impact map of what we buy, as well as to learn from those who are further advanced on their journey than we are. We are also using this as an opportunity to share insights with and support SMEs who may have less experience in measuring and monitoring their emissions.



SUSTAINABILITY: ENVIRONMENT continued

Our roadmap to net zero

We have already made significant strides towards more sustainable operations over several years, leaving us with a relatively small remaining footprint in Scopes 1 and 2. In the coming year, we will further develop and prioritise our roadmap to net zero. The steps we will take between now and 2045 include:

- ensuring that all of our sales, service and manufacturing operations, wherever possible, are powered by REGO-certified or REGO-equivalent certifications of renewable electricity, looking to move from current sites as leases come up for renewal where this is not achievable;
- seeking environmentally friendly sites when we are looking for new sales, services or manufacturing facilities;
- looking for opportunities to reduce energy usage at each of our sites;
- replacing gas and oil boilers as suitable long-term alternative technologies become available; and
- switching fleet vehicles to electric rather than internal combustion engines.

Despite the reduction of our Scope 3 emissions being more challenging, as set out on page 55, we are proactively engaging with our supply chain, and as our approach matures, suppliers' approaches to decarbonisation will form a key part of our future purchasing decisions. We have also engaged an external sustainability adviser to help us build a data-led roadmap of the likely timeline scenarios for the reduction of the main contributing materials and components within our Scope 3 emissions.

Our progress

Our footprint across our operations has reduced by 6.7% year-on-year in absolute terms, and by 23% year-on-year in terms of our carbon intensity metric (tCO₂e per £million revenue). This indicates that our emissions are moving in the right direction – and, crucially, that although our business is growing, our emissions are not. Part of the reduction we have been able to demonstrate this year stems from our growing understanding of our global operations with a wide variety of leases and associated power arrangements. We continue to purchase REGO-certified renewable electricity for our four primary manufacturing sites in Oxford, Belfast, Bristol and High Wycombe, and are committed to doing so on an ongoing basis. This represents the manufacturing for 83% of our annual revenue.

Energy source	Usage 2022/23	Usage 2021/22
Electricity	11.58 GWh	10.01 GWh
Gas	1.62 GWh	2.43 GWh
Oil	0.59 GWh	0.53 GWh
Purchased district heating and steam	0.22 GWh	0.22 GWh
Propane	0.006 GWh	0.007 GWh
Owned vehicles	0.38 GWh	0.35 GWh
Total	14.41 GWh	14.91 GWh

When selecting new sites for our operations, we are committed to choosing facilities which are powered by renewable energy wherever possible. This year we have made the decision to consolidate our two Tokyo sites and are set to move to a new, highly sustainable building in summer 2023. With solar power, water-conservation and energy-saving measures, as well as having been constructed in part from recycled materials, the new site is a 4-star certified DBJ (Development Bank of Japan) green building. We also have an ongoing programme to improve energy efficiency at existing sites.

Actions taken during the year have included continuing to replace fluorescent lighting with LED lighting, optimising heating, ventilation and air-conditioning systems and rebalancing some electrical systems to improve efficiency.

Building on the continued strong engagement of our employees with environmental issues, we have continued to empower our Go Green teams across our sites to help us further embed sustainability initiatives throughout the Group. The support of our employees, combined with our focused efforts, has enabled us to make excellent progress in continuing to understand and manage our CO₂ emissions, and to educate each other, while continuing to reduce the amount of waste products generated at our manufacturing sites and facilities.

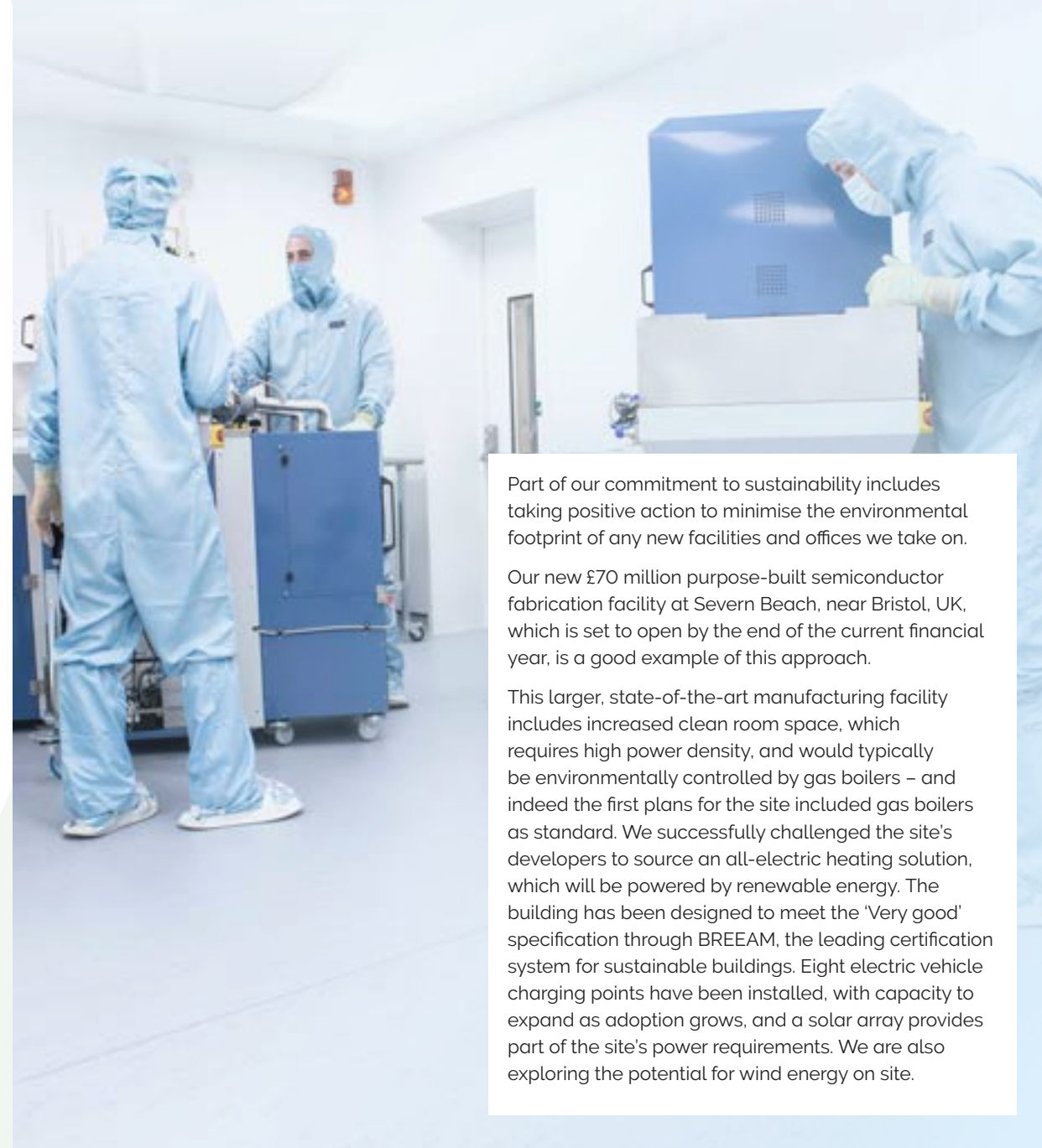
For more information on our progress, please see our TCFD statement progress roadmap on page 60.

Streamlined Energy and Carbon Reporting (SECR)

We have a statutory duty to report greenhouse gas emissions as tonnes of carbon dioxide equivalent (tCO₂e). Our chosen carbon intensity measure of energy use is tCO₂e per £million revenue, since this metric is best suited to a company like ours which is growing both organically and by acquisition. We report in line with the requirements of SECR, as set out in the UK Companies Act 2006 (Strategic Report and Directors Report) Regulations; our full SECR report can be found on our website www.oxinst.com and our abbreviated reporting is on page 58.

CASE STUDY

A new facility for Plasma Technology



Part of our commitment to sustainability includes taking positive action to minimise the environmental footprint of any new facilities and offices we take on.

Our new £70 million purpose-built semiconductor fabrication facility at Severn Beach, near Bristol, UK, which is set to open by the end of the current financial year, is a good example of this approach.

This larger, state-of-the-art manufacturing facility includes increased clean room space, which requires high power density, and would typically be environmentally controlled by gas boilers – and indeed the first plans for the site included gas boilers as standard. We successfully challenged the site's developers to source an all-electric heating solution, which will be powered by renewable energy. The building has been designed to meet the 'Very good' specification through BREEAM, the leading certification system for sustainable buildings. Eight electric vehicle charging points have been installed, with capacity to expand as adoption grows, and a solar array provides part of the site's power requirements. We are also exploring the potential for wind energy on site.

SUSTAINABILITY: ENVIRONMENT continued

Scope 1, Scope 2 and relevant Scope 3 greenhouse gas emissions (GHG)

Type of emissions	2022/23		2021/22		% difference in emissions
	tCO ₂ e	% of total	tCO ₂ e	% of total	
Direct (Scope 1)	603.4	47.0%	560.6	40.7%	+8%
Indirect (Scope 2) (market-based)	681.5	53.0%	817.0	59.3%	-17%
Indirect (Scope 2) (location-based)	2,511.9		2,803.5		-10%
Scope 1 and 2 (market-based) total	1,285.0	100.0%	1,377.6	100.0%	-6.7%
Total gross emissions (tCO ₂ e) (market-based)	1,285.0		1,377.6		-6.7%
Intensity ratio (market-based): Scope 1 & 2 tCO ₂ e per GBP £m turnover	2.89		3.75		-23%
Energy consumption used to calculate					
Scope 1 and 2 emissions kWh	14,409,374		14,317,185		+0.6%

Our total carbon footprint for April 2022 to March 2023 is as follows:

Type of emissions	Activity	Emissions (tCO ₂ e)	% of total
Direct (Scope 1)	Natural gas	296.6	23.0%
	Gas oil	162.8	12.7%
	Propane	1.3	0.1%
	Owned vehicles		
	Petrol	52.1	4.1%
	Diesel	42.1	3.3%
	Refrigerant	48.5	3.8%
	Subtotal	603.4	47.0%
Indirect energy (Scope 2)	Purchased non-renewable electricity	673.6	52.4%
	Purchased renewable electricity	0.0	0.0%
	Purchased district heating and steam	8.0	0.6%
	Subtotal	681.6	53.0%
Total emissions (tCO₂e)			1,285.0
Energy consumption used to calculate emissions (kWh)			14,409,374
Intensity ratio: Tonnes of gross CO₂e per million GBP turnover			2.89

Business travel

As part of our commitment to reduce our environmental footprint, we are continuing to map and better understand our Scope 3 indirect emissions across the Group. These include business travel, where we are increasingly able to source granular data on distances travelled. Our strategy is to minimise the amount of travel undertaken, in particular by finding new ways to connect with customers (with customer service and sales currently our biggest sources of travel emissions), including increasing digital and remote service and expanding regional teams to bring them closer to our customers (see pages 50–51). We will continue to progress both the extent of our reporting and, most important, to take the tangible steps needed to reduce our footprint.

We have identified that our teams in the UK, USA, China and Japan undertook around 16.8 million km of air travel in FY2022/23, with the air travel carbon equivalent to 2,704.4 tCO₂e. This significant rise versus the prior year (2022: 6.0 million km), primarily reflects our deepening understanding of the amount of travel undertaken, but has also been impacted by the opening up of international travel routes as Covid-19 lockdown restrictions eased, particularly in Asia (a key market for the Group). When considered against an intensity metric (km travelled per £m of Group revenue), the number of kilometres travelled is trending around 16% below pre-Covid-19 levels (2019/20: 44,934km per £m revenue; 2022/23: 37,756km per £m revenue).

Air travel 2022/23	=	16,790,212 km (2021/22: 5,980,961 km)
Carbon equivalent	=	2,704.4 tCO ₂ e (2021/22: 947.5 tCO ₂ e)

Environmental directives

As a Group, we are committed to ensuring compliance with all environmental legislation in the countries where we operate. This includes European directives such as:

- Waste Electronic and Electrical Equipment (WEEE) Directive – compliance achieved in the UK by membership of B2B Compliance – an authorised compliance body. Other compliance bodies are contracted for our European operations;
- Restriction on the use of Hazardous Substances (RoHS) regulations;
- Registration, Evaluation, Authorisation of Chemicals (REACH) Directive;
- European Waste Framework Directive. This requires the company to enter data on parts and products that may contain Substances of Very High Concern (SVHC) into a database being set up by the European Chemical Agency (ECHA). This is known as the SCIP database and businesses are currently engaged in determining what should be entered into the database to ensure compliance.

Water and waste

While we measure our water usage, the level is minimal and not material, so has been excluded from this report. We have also excluded our use of hydrofluorocarbons. Our four primary manufacturing sites in the UK, generating 83% of Group revenue, are sending zero waste to landfill; our waste is recycled either directly or indirectly, for example general waste is used to generate electricity at dedicated incinerator sites.

SUSTAINABILITY: TCFD STATEMENT

Task Force on Climate-Related Financial Disclosures (TCFD) Statement for the year ended 31 March 2023

Introduction

Mitigating, adapting and responding to the impacts of climate change is central to our strategy, both in terms of how we operate our business, and in terms of the positive contribution we make towards a greener world through our products and services.

We have made it a core priority over many years to reduce the environmental impact of our operations. By 2018/19, our baseline year for carbon target measurement, we had already reduced our carbon intensity ratio (the most consistent metric in a growing company like ours) by nearly 70%, from 27.5 tCO₂e per £million revenue in 2013/14, our first year of reporting, to 8.5 tCO₂e per £million revenue. This was achieved through transformations

within our business, including energy efficiency programmes and investments such as switching to LED lighting. This year's report shows that our strong progress continues, with our carbon intensity ratio now at 2.89 tCO₂e per £million revenue – a 66% reduction since 2018/19. A further area of focus and action has been the reduction of waste sent to landfill from our manufacturing processes and facilities (see table below), with all four UK manufacturing sites now classified as sending zero waste to landfill.

We are committed to maintaining our progress, and this year have set ambitious decarbonisation targets, as set out below. We have also continued to focus on working with our supply chain to reduce our extended carbon footprint, and on

developing our understanding of the climate-related risks we face and the opportunities arising from the changing climate. Crucially, our commitment to sustainability, while led by the Board, is embedded throughout our organisation, and is central to our purpose: to enable a greener, healthier, more connected advanced society.

Progress roadmap

A snapshot of our journey so far, our progress during the latest financial year and our action plan for the year ahead, are summarised in the table below. Our environmental reporting on pages 54 to 59 of this report sets out our progress in further detail.

Prior to FY22/23	Progress during FY22/23	Focus for FY23/24
<ul style="list-style-type: none"> Established a 'Go Green' committee at each key manufacturing site to deliver a local environment agenda and promote positive behaviours. Invested in sustainable infrastructure and renewable technology, including the energy-efficient design of our new Plasma Technology facility. Converted three manufacturing sites to achieve zero waste to landfill, with the business units on these sites representing approximately 60% of Group revenue in FY22/23. Confirmed our aspiration to reach net zero carbon emissions ahead of 2050. Produced our first report aligned with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) in June 2022. Sourced certified renewable electricity for all of our UK manufacturing sites. 	<ul style="list-style-type: none"> Worked with the Board and Sustainability Committee to develop our abatement strategy and to consider the offsetting options for residual emissions. Set new, ambitious targets to reach net zero carbon emissions by 2045. Set interim targets for our remaining Scope 1 and 2 emissions (a 50% reduction in Scope 1 and a 70% reduction in Scope 2 by 2030 versus 2018/19 baseline). Maintained 100% renewable electricity across our UK manufacturing activities, with the applicable business units representing approximately 83% of Group revenue in FY21/22. Reduced our CO₂ emissions by 55% from 2,844 tCO₂e to 1,285 tCO₂e, between FY18/19 and FY22/23. Further reduced the volume of waste to landfill by adopting a zero waste to landfill approach at our Belfast manufacturing site, ensuring that four sites representing 83% of Group revenue in FY22/23 send no waste to landfill. Reviewed our position with the Science Based Targets initiative (SBTi) and agreed to work through SBTi process. Completed full Scope 1 and 2 emissions assessment and calculation for the latest financial year and for 2018/19 baseline year; completed baseline assessment for Scope 3 emissions. 	<ul style="list-style-type: none"> Submit interim and long-term carbon reduction targets for validation through the Science Based Targets initiative (SBTi). Complete full Scope 3 emissions assessment and continue engagement with key suppliers. Set out our roadmap to net zero for Scope 1, 2 and 3 emissions. Progress contracting of renewable electricity across our non-UK sites. Assess which are the most relevant climate impact reporting frameworks for Oxford Instruments and adopt as appropriate. Continue to build on our quantitative climate scenario analysis as part of TCFD alignment. Extend our rollout of Go Green teams to non-manufacturing sites.

Compliance Statement

As we are a premium listed company, we have reported on a 'comply-or-explain' basis against the TCFD framework. This Report and Financial Statements contains our full TCFD disclosures. A copy can also be found in the sustainability section of our website: oxinst.com/sustainability.

In line with the requirements of the Financial Conduct Authority's Listing Rule 9.8.6(8)R, we note that while our disclosures in respect of the financial year ended 31 March 2023 are full and transparent and cover all the areas required by TCFD, there are some areas where we need to make further progress in order to meet its recommendations and recommended disclosures in full. The below table summarises our consistency per the disclosures made in this report, together with cross-references to the various sections of our Report and Financial Statements where additional relevant information can be found.

In determining whether our climate-related financial disclosures were consistent with the TCFD recommendations and recommended disclosures, we undertook a detailed assessment of those disclosures, supported by external advisers, which considered the applicable guidance referenced under Listing Rules 9.8.6B to G.

TCFD pillar	Recommended disclosure	Consistency	Disclosure location
Governance: Disclose the organisation's governance around climate-related risks and opportunities.	a. Describe the Board's oversight of climate-related risks and opportunities.		Pages 62–63
	b. Describe management's role in assessing and managing climate-related risks and opportunities.		Pages 62–63, 70
	Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	a. Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	
Risk management: Disclose how the organisation identifies, assesses, and manages climate-related risks.	b. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning. ¹		Page 70, 101
	c. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. ²		Page 64
	a. Describe the organisation's processes for identifying and assessing climate-related risks.		Pages 70–71
Metrics and targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	b. Describe the organisation's processes for managing climate related risks.		Pages 70–71
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.		Pages 70, 94
	a. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. ³		Pages 70–71
	b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.		Page 58
	c. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.		Pages 70–71

- Indicates internal assessment of full consistency with recommended disclosures.
- Indicates internal assessment of partial consistency with recommended disclosures. We are fully committed to achieving full consistency with the recommended disclosures and will continue to work towards this over the coming year. The gaps we have identified in our disclosures are set out below.

1. The impacts of climate-related risks and opportunities are not yet fully integrated across the required areas; we will seek to do this as our understanding deepens.
 2. We have not yet carried out a complete climate assessment against a full range of scenarios. See page 64 for further details.
 3. The metrics we have used do not yet extend to the full range of risks and opportunities arising. Please see pages 70 to 71 for further details.

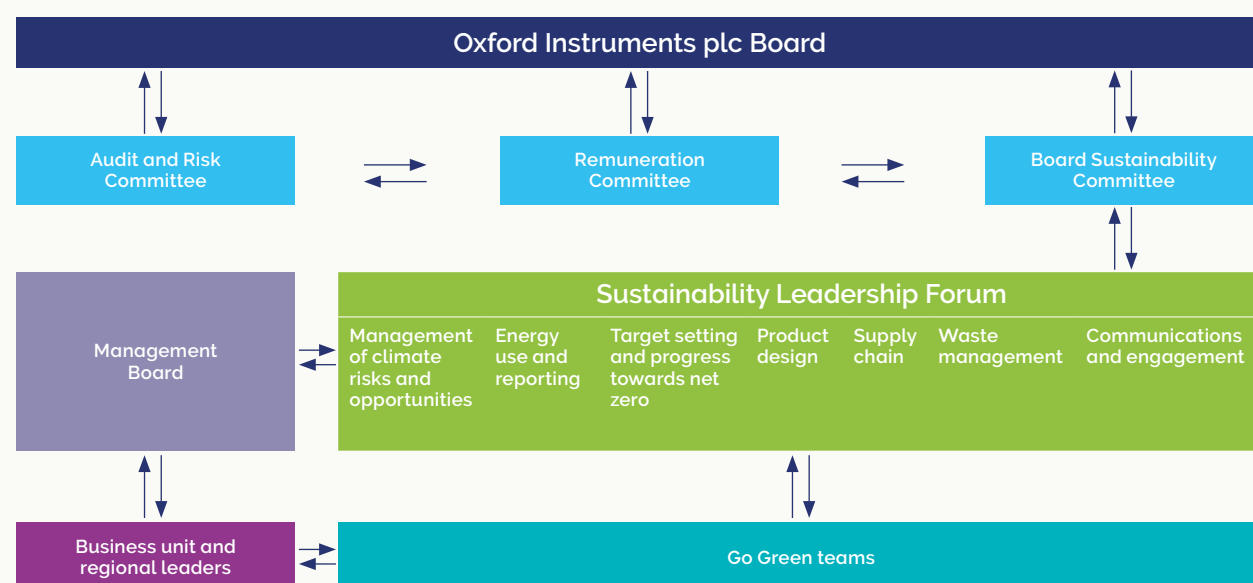
SUSTAINABILITY: TCFD STATEMENT continued

Governance

To successfully evaluate and respond to the challenges and opportunities posed by climate change, we recognise the importance of embedding knowledge of climate change issues across the business, supported by effective governance. Our governance around climate-related risks and opportunities is set out below.

The Board has ultimate responsibility for the oversight of climate change-related issues and is supported by its Committees (primarily the Sustainability Committee, the Audit and Risk Committee and the Remuneration Committee), the Management Board, the Sustainability Leadership Forum, set up in 2022, and the wider senior leadership team. However, climate change-related considerations are embedded throughout our governance structure, and at every level across the organisation, as set out in the graphic and explained in more detail below.

Climate-related governance framework



Note to graphic: Arrows indicate two-way transfers of information and guidance between forums.

The Board provides overall strategy and direction on climate-related risks and opportunities, and environmental strategy, including overseeing progress to net zero targets, and assesses how these are being managed.

The Board's Sustainability Committee, comprising all the Non-Executive Directors (see Committee Report, pages 141 to 143), holds a broad remit including accountability for assessing and reporting to the Board on progress against the environmental strategy, targets and metrics, and meets at least three times a year. The Audit and Risk Committee provides oversight and governance in relation to climate change-related risks and opportunities, which are managed operationally by the Management Board and Sustainability Leadership Forum, while the Remuneration Committee is responsible for setting and overseeing climate change-related remuneration incentives, together with any other sustainability-related incentives.

The Sustainability Committee in turn provides strategic guidance and oversight to the management-level Sustainability Leadership Forum (SLF), which is chaired by the Chief Executive. Representatives of the SLF attend Sustainability Committee, and a positive two-way dialogue between the two bodies fosters exchanges of information and insights. The SLF, set up in 2022, meets at least quarterly, and is primarily responsible for detailed development of strategy, together with the assessment, management and tactical delivery of the environmental remit.

Its membership includes functional heads and subject matter experts, who lead workstreams on:

- the management of climate risks and opportunities;
- energy use and reporting;
- development of target setting and progress towards net zero;
- product design;
- supply chain;
- waste management and recycling; and
- communications and engagement.

Committee members also lead liaison with an external consultant on climate, energy and progress to net zero.

A key part of the SLF's remit, working in collaboration with the Management Board, is to foster two-way engagement with business units, regional leadership and Go Green teams to drive and accelerate Oxford Instruments' progress towards net zero and our management of climate risks and opportunities.

Progress in the year

The Directors have considered climate-related matters throughout the year, with such matters forming part of the discussions in a range of areas including the company's strategy. The primary focus for the Board and Sustainability Committee in relation to climate during the year has been to obtain a detailed understanding of the actions required to decarbonise our operations and mitigate the impact of climate risk. The Committee has used this information to set ambitious but achievable decarbonisation targets, while developing its understanding

of the Science Based Targets initiative (SBTi) and exploring our potential targets with reference to this framework. This is in line with the duties delegated to the Sustainability Committee by the Board, through its formal terms of reference. It is anticipated that progress against these goals will be considered as appropriate at Sustainability Committee meetings going forward.

During the year, the Sustainability Committee has held dedicated sessions with the Chief Executive, Management Board and external consultants. Outside formal meetings, the Chair of the Sustainability Committee and Chief Executive worked directly with various members of the wider management team and external consultants and reported back to the Board regarding the insights gained into recommended actions and targets.

As set out on pages 54 to 59, this process has culminated in setting our 2045 ambition to reach net zero for Scope 1, 2 and 3 emissions, as well as medium-term targets for Scopes 1 and 2. With the sponsorship and support of the Chief Executive, a working group of the Sustainability Leadership Forum has initiated detailed engagement with supply chain partners representing 80% in value terms of the goods and services we purchase, in order to deepen our understanding of the decarbonisation pathway for Scope 3 category 1 emissions. We have also commissioned external research to support our understanding.

With external support, we are establishing a detailed roadmap towards our net zero carbon emissions targets, and will submit both our targets and our roadmap to SBTi for validation in 2023/24.

To support our progress towards net zero, the Remuneration Committee has considered and intends to implement measures which recognise the importance of our decarbonisation activity, within future long-term incentive structures, as reported on pages 146 to 147.

Through its quarterly Audit and Risk Committee meetings, the Board has also considered the Group's wider climate-related risks and opportunities and liaised with the Head of Internal Audit and Risk to fully understand the methodologies used to determine these. One of its focus areas during the year was the integration of the process for identifying, evaluating, and reporting on climate-related risks and opportunities across the Group into the wider enterprise risk management processes. This included the adoption of a standardised methodology for performing climate risk assessment.

The Board and its Committees will, through continued education and sharing of information, aim to stay abreast of developments concerning climate change and other environmental issues.

SUSTAINABILITY: TCFD STATEMENT continued

Strategy

We recognise that climate-related risks and opportunities could have a significant impact on our business model and strategy, both positive and negative.

Recognition of the risks and opportunities relating to climate change is inherent in our purpose – to enable a greener, healthier, more connected advanced society – and our business strategy, particularly in terms of the end markets and applications we address (see Market context, pages 28 to 29, and Strategy, pages 34 to 35). We are increasingly embedding climate change-related considerations into strategy, including the following areas:

- Services strategy, where we are extending digital service offerings to reduce the amount of travel to customers and building remote connectivity into our products to facilitate remote diagnostics.
- Supply chain, where we are carrying out engagement in order to set and achieve appropriate Scope 3 emissions reduction targets.
- Product development, where we are embedding sustainability criteria into our stage gate processes in order both to limit our Scope 1 and 2 emissions and to support customers in reducing their own emissions.

We also consider financial implications of risks and opportunities using our Group and business risk reporting.

We consider climate-related risks and opportunities across the short, medium and long term, with these timeframes defined, in line with our overall risk framework, as:

Impact time horizon	Year from	Year to	Duration
Short term	2023	2030	<10 years
Medium term	2030	2050	10-30 years
Long term	2050	2100	30+ years

Likelihood

Likelihood	Description
☹ Highly unlikely	< 10% likelihood that the risk/opportunity will occur with 2°C/4°C climate change
☺ Low	10%-20% likelihood that the risk/opportunity will occur with 2°C/4°C climate change
☺ Moderate	20%-50% likelihood that the risk/opportunity will occur with 2°C/4°C climate change
☹ Highly likely	> 50% likelihood that the risk/opportunity will occur with 2°C/4°C climate change

Climate scenario analysis

Qualitative work, to further develop our understanding of the potential impact on our business of climate-related physical and transition risks and opportunities considering a range of climate change scenarios, is ongoing. We have not yet undertaken specific scenario analysis and so are not able to report on the key input assumptions, analytical methods or outcomes. We are working to determine the appropriate methodology and modelling tools to be used to extend this exercise. We note that the approach may comprise stakeholder engagement and the prioritisation of climate-related risks and opportunities which may require deeper analysis via quantitative modelling. This work will ultimately support our understanding of the resilience of our low carbon transition plan under different climate change scenarios.

The outcomes from further climate scenario analysis will be considered as part of our process for the assessment of climate change-related risks and will support our future climate-related financial planning.

The climate-related risks and opportunities we have identified over the short, medium and long term.

Climate-related risks and opportunities are characterised in the terms set out below.

Physical risks	Transition risks
<p>Physical risks stemming from geo-environmental location events, including severe weather events (acute), or long-term changes (chronic) in climatic conditions can cause severe damage and disruption to companies' operations and supply chain and generate increased product prices.</p> <p>Acute physical risks – Those that are event-driven, including increased severity of extreme weather events, such as increased heatwaves, droughts, fires, storms, cyclones, hurricanes or floods.</p> <p>Chronic physical risks – Longer-term shifts in climate patterns (e.g. sustained higher temperatures or rainfall patterns) that may cause sea level rise or chronic heatwaves.</p>	<p>With increasing scrutiny of company climate change-related strategies, and as global net zero target-setting continues, we are seeing market-related, regulatory and reputational risks develop.</p> <p>Technology risk – Technological improvements or innovations that support the transition to a lower-carbon, energy-efficient economic system can have a significant impact on organisations.</p> <p>Market risk – Whilst the circumstances in which markets could be affected by climate change are varied and complex, one of the major ways is through shifts in supply and demand for certain commodities, products and services, as climate-related risks and opportunities are increasingly considered.</p> <p>Policy – Policies that attempt to curb or constrain actions that contribute to the adverse effects of climate change or that seek to promote adaptation to climate change.</p> <p>Legal actions – Recent years have seen an increase in climate-related litigation being brought before the courts by property owners, municipalities, states, insurers, shareholders, and public interest organisations.</p> <p>Reputational risk – Arising from stakeholder perceptions of an organisation's environmental credentials, including any contribution to, or detraction from, the transition to a lower-carbon economy.</p>

We have carried out a high-level assessment of the climate-related physical risks relating to our four key manufacturing sites in the UK: our Head Office at Tubney Woods, near Oxford (NanoScience); Andor Technology in Belfast; Oxford Instruments High Wycombe (NanoAnalysis and Magnetic Resonance) and Oxford Instruments Plasma Technology, which currently operates from Yatton in North Somerset and is soon to move to new premises at Severn Beach (see page 57). These sites represent more than 80% of our operations in terms of revenue.

All four sites are at low (1% a year) or very low risk (less than 0.1% a year) from river, sea and surface water flooding, based on published Environment Agency data and internal risk assessments, and therefore we do not currently consider that any flood risk mitigation is required.

All manufacturing sites are required to consider the potential impact of climate-related risks as part of their business continuity plans and implement appropriate mitigating actions when required. Our head office site, including the NanoScience manufacturing facility, is surrounded by woods, and the facilities team works with the adjacent landowner (the Forestry Commission) to manage the risks associated with the physical environment. As part of our ongoing work relating to climate change-related risks, Internal Audit has been instructed to review existing business continuity plans during FY23/24 in order to identify potential opportunities for improvement.

Over the coming financial year, we plan to carry out an assessment to cover our key remaining global sites. We also consider climate risk when identifying new sites, such as our new offices in Tokyo, as described on page 56.

The climate-related risks and opportunities we see as most material for Oxford Instruments are set out on the following pages. Below, we set out our assessment of the financial impact should these arise.

SUSTAINABILITY: TCFD STATEMENT continued

Impact

Rating	Financial impact (risk or opportunity)	Transitional (2°C change)	Physical (4°C change)
Severe	More than £5m	<ul style="list-style-type: none"> Complete relocation of manufacturing Significant change in supplier base Change in technology due to supply constraints 	<ul style="list-style-type: none"> Relocation of facilities due to flood, excess heat or wildfires Potential for product obsolescence plus new markets and opportunities as the paradigm shift required to deal with extremes of climate change drives the emergence of new or disruptive technologies (e.g. the hydrogen economy) that previously might not have been commercially viable
Major	£2m – £5m	<ul style="list-style-type: none"> Investment in infrastructure required, for example in relation to additional cooling, water supply or power Significant change in supplier base 	<ul style="list-style-type: none"> Increased severe weather causing continued disruption Multiple changes in supplier Loss of customers due to global changes
Significant	£1m – £2m	<ul style="list-style-type: none"> Relocation of sales offices to another country Changing of suppliers 	<ul style="list-style-type: none"> Investment in infrastructure required, for example in relation to additional cooling, water supply or power Significant change in supplier base
Notable	£250k – £1m	<ul style="list-style-type: none"> Additional investment infrastructure to manage global change 	<ul style="list-style-type: none"> Relocation of sales offices to another country Changing of suppliers
Insignificant	Less than £250k	<ul style="list-style-type: none"> Minor relocation of personnel Update of company fleet to electric vehicles 	<ul style="list-style-type: none"> Relocation of sales offices within same country Changing of minor suppliers

The risks and opportunities which we consider to be most material for us at present are set out below.

Climate-related risks

Acute physical risks

	Context	Risk impact	Time horizon	Likelihood	Magnitude of impact	Impact area	Current risk controls
Severe event disrupts global supply chains	Flooding and/or other natural disasters linked to climate change could lead to shortages in the global availability of key components.	Supply chain disruption leading to higher prices or shortages of raw materials. Impact on increased cost of sales or, in the extreme, disruption to production until normal supply resumes or alternatives can be found.	Medium term	🟩	Significant	Operations	Long-term supply agreements with key suppliers can mitigate short-term price volatility. Business interruption insurance provides a degree of cover in the event that supply chain issues cause significant disruption to production.
Severe event causes existing customers to relocate operations	Flooding and/or other natural disasters linked to climate change could cause customers to relocate from areas that are particularly affected by the physical impact of climate change.	Unforeseen relocations may lead to a short-term hiatus in demand. As a Group we may need to adapt and relocate operations ourselves to meet the revised geographical profile of demand.	Medium term	🟩	Notable	Service operations	Strategic review of logistics, supply chain, manufacturing, and service operations.
Extreme weather impacts operations	Disruption to manufacturing operations due to loss of infrastructure arising from wildfires or other physical damage related to climate change. Particularly relevant for operations in California.	Potentially ranging from short-term disruption to operations if employees are unable to access facilities (e.g. due to road closures), to major disruption in the event of a total loss of the manufacturing facilities.	Medium term	🟨	Notable to severe	Operations and customers	Business continuity plans and global business interruption insurance.
Extreme weather impacts global logistics capacity	Logistics disruption due to extreme weather events, or loss of infrastructure due to rising water levels (reduced airport and port capacity).	Increased competition for limited transport options drives up the price of transport, affecting both goods in and goods out.	Medium term	🟩	Notable	Operations and customers	Strategic review of logistics, supply chain, manufacturing, and service operations.

Likelihood key

- 🟩 Highly unlikely
- 🟨 Low
- 🟧 Moderate
- 🟥 Highly likely

Time horizon key

- Short term
- Medium term
- Long term

SUSTAINABILITY: TCFD STATEMENT continued

Climate-related risks

Transition risks

	Context	Risk impact	Time horizon	Likelihood	Magnitude of impact	Impact area	Current risk controls
Component obsolescence due to regulatory changes (Policy and legal)	Ban on critical materials or production processes in either our own operations and/or our supply chain as a result of regulatory changes.	Rise in material prices for switching to compliant products or disruption to production if unable to react in sufficient time.	Short term	⬆️	Significant	Operations	We have product compliance processes in place to manage this type of change in the regulatory environment, with oversight and support from the Group Head of Quality. We use existing processes to meet Restriction of Hazardous Substance (RoHS) and Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) requirements, which remain appropriate to manage future changes in standards.
Regulatory (Policy and legal)	The need to mitigate and adapt to the impacts of climate change is driving rapid regulatory change across the globe.	Failure to keep pace with environmental legislation and reporting requirements.	Medium term	⬇️	Significant	Operations	We have dedicated internal risk, legal and environmental management resource, as well as investing in external consultancy, to ensure that we are aware of, and remain compliant with, legislation. Our adoption of ISO 14001 accreditation at our four UK manufacturing sites at Belfast, Bristol, High Wycombe and Oxford supports our mitigation of climate risk.
Price inflation from decarbonisation (Market)	Global supply chains implementing more expensive production methods and/or changes in raw materials in order to reduce CO ₂ emissions.	Increased material cost of sales leading to reduced margins without increases in selling price.	Short term	⬇️	Significant	Operations	Product Development and Strategic Sourcing teams identify and evaluate viable alternatives in materials and processes and work closely with key suppliers to deliver supply chain solutions.
Reputation and investability (Market)	Companies' approach to mitigating and adapting to the impacts of climate change is now a key factor in customers' and shareholders' purchasing and investment decisions.	Failure to decarbonise and address climate impacts at sufficient pace, leading to loss of shareholders and customers, and reputational damage.	Medium term	⬇️	Significant	Customers, shareholders, society	Board-level scrutiny and oversight, and an organisation-wide focus on addressing the risks and opportunities arising from climate change, together with a focus on impact reporting, wider communications and stakeholder engagement.

Climate-related opportunities

	Context	Opportunity impact	Time horizon	Likelihood	Magnitude of impact	Impact area	How we are capitalising
Investment in R&D required for decarbonisation (Transition: Technology)	Product innovation will be required to decarbonise the economy. It will entail significant expenditure on research and development into new materials, technologies, and new ways of working.	Due to the requirement for decarbonisation, demand for Oxford Instruments' products and services may increase. Product innovation as a result of decarbonisation may help reduce operating costs, e.g. through remote delivery services.	Short term	⬆️	Significant	Customers, shareholders, society	Our products and services play a key role in the technology pathway to enable the transition from fossil fuels to a low-carbon economy. Our enabling technologies, such as materials analysis solutions and semiconductor equipment, help customers address these challenges.
Geopolitical uncertainty and resource competition (Transition: Regulatory)	Geopolitical tensions may arise from climate change, leading to increased requirement for local development and manufacturing capacity in the growing markets of Semiconductor & Communications and Quantum Technology.	Increased demand for enabling technologies resulting in an increased market opportunity for our business.	Short term	⬆️	Significant	Shareholders	We continue to invest in our product portfolio to assist our customers in delivering their global and regional roadmaps and supporting sufficient manufacturing capacity by location.
Accelerated customer adoption of remote services solutions (Transition: Market)	As the Group and its customers seek to reduce the emissions arising from their activities, the non-financial business case for remote service solutions will become increasingly compelling.	Increased demand for remote service, training, analytics and diagnostic solutions, enabling a faster response, higher-quality customer experience and more efficient deployment of personnel with in-demand skills such as service engineers, applications specialists, etc.	Short term	⬆️	Significant	Customers, service employees, the company	Designing remote connectivity into our products and building business system infrastructure to enable remotes service capabilities.
Migration from fossil fuels to renewable energy (Transition: Market)	The path to net zero requires migration from fossil fuel energy to renewables (e.g. from internal combustion engine vehicles to electric vehicles). The speed of change is likely to be accelerated by geopolitical supply concerns over fossil fuels.	Increased demand for our products and services that enable the development of more efficient battery technology and highly efficient energy conversion devices.	Short term	⬆️	Significant	Shareholders, customers, society	Increased investment in key enabling technologies such as analytical instruments and semiconductor equipment that are key in the transition to renewables.

SUSTAINABILITY: TCFD STATEMENT continued

The impact of climate-related risks and opportunities on our businesses, strategy and financial planning.

We consider climate change to be a principal risk for Oxford Instruments, but also a source of material opportunity, given our focus on enabling a greener society and the end markets we serve. Our assessment is based on having evaluated key climate-related risks and opportunities, including understanding the potential impact of each in terms of its time horizon, likelihood and magnitude, and the stakeholders or areas of the business that may be affected.

During FY 22/23, we have worked to prioritise the actions needed to mitigate these risks and capitalise on the opportunities, basing this on their impact and ease of implementation. We are now focusing on integrating these actions into our strategy, product development roadmap and financial planning.

Risk management**Our process for identifying and assessing climate-related risks.**

We define risk as uncertain events which could have an adverse impact on the Group's business model, financial performance, liquidity or reputation. Our approach to identifying and assessing risks and opportunities is set out in detail in the Risk Management section on pages 94 to 99 of the Report and Financial Statements 2023.

Throughout the year we maintained a separate process for the identification and assessment of climate change-related risks, distinct from the wider enterprise risk management process, although the results of the assessments are now integrated into the businesses' quarterly risk reporting framework. This process is adapted to ensure that the nuances required by the TCFD reporting framework are captured and that climate change-related opportunities are highlighted.

When assessing climate-related risks, we consider both the impact and likelihood of occurrence across short, medium and long-term impact time horizons, as defined above, and consistent with our wider organisational risk framework. This provides an inherent risk score which is then used to rank our risks.

Climate-related risks and opportunities

Our process for the assessment and management of climate-related risks and opportunities across all business units and regions mirrors the process that the Group uses for wider enterprise risk management (see pages 94 to 96). Risks and opportunities are evaluated against a scoring matrix of likelihood and impact. Likelihood considers the probability of the risk or opportunity occurring, whilst impact evaluates the magnitude of the potential consequences, whether in financial, reputational or other terms.

The guidance used when assessing impact and likelihood are as set out below and the ratings are aligned to those used as part of our wider enterprise risk management process.

Climate risk assessment is carried out on a quarterly basis ahead of being reported to the Board via its Audit and Risk Committee. As with wider enterprise risks, the Board as a whole is responsible for determining how risks are to be managed.

Our processes for identifying climate-related risks include granular assessments from individual businesses and region, combined with a Group-level review, particularly through horizon-scanning for regulatory changes. This is carried out by the legal and regulatory, product management and health and safety functions. Further, internal assessments are complemented by input from external advisors. New regulatory requirements are implemented as they arise and any further actions taken as appropriate.

Metrics and targets

We currently use a range of metrics to help us to track our progress across a number of climate-related and sustainability-related areas. This includes assessment of our electricity consumption, Scope 1 and 2 emissions in line with the Greenhouse Gas Protocol methodology, water and waste, the use of hydro fluorocarbons and the impact of transport. Please see the environment section of our Report and Financial Statements on pages 54 to 59 for further information, and for an abridged version of this year's SECR reporting, the primary means by which we report our impact.

As set out in the environment section (pages 54 to 59), we are committed to reaching net zero carbon emissions (where we add no incremental greenhouse gases to the atmosphere) against Scopes 1, 2 and 3 by 2045, in line with a 'well below 2' scenario'. We are further committed to monitoring and calculating our carbon footprint in line with industry standards. We have set our interim targets at a 50% reduction in Scope 1 emissions by 2030 and a 70% reduction in Scope 2 emissions by the same date, both against a 2018/19 baseline. During the year we have worked with an external consultant to validate our assessment of our Scope 1 and 2 emissions, and the carbon footprint of our baseline year (2018/19). In the coming financial year, we will submit our Scope 1, 2 and 3 targets and roadmap to the Science-Based Targets initiative for validation.

Our footprint for Scope 1 and 2 emissions is calculated and reported in absolute numbers against our baseline year; we also use an intensity metric (tonnes of CO₂ equivalent per £ revenue) in order to help contextualise our performance as our business grows.

We are committed to working with our supply chain to reduce our Scope 3 emissions, the largest element of our environmental footprint. We have begun engagement with our top 80 suppliers (see page 55) and have also commissioned external research into the decarbonisation pathway for key components, to inform our interim target setting for Scope 3 emissions and ensure that, while ambitious, it is evidence based and achievable. We anticipate being in a position to set interim targets in 2023/24. Overall, we consider ourselves partially compliant with the recommended disclosures on cross-industry targets and metrics. To drive behaviours in line with our focus on reducing GHG emissions, a new measure is being incorporated into remuneration objectives for Executive Directors. The measure (see page 174) will require continued reductions in our Scope 1 and Scope 2 emissions. Over the coming year, we will give consideration to further metrics and targets in line with the TCFD recommended disclosures.

We are also developing metrics to measure the positive impact that our portfolio provides in enabling a greener, healthier, more connected advanced society. Assessing our progress towards reaching these targets will then form a crucial part of the future work of the Sustainability Committee.

SUSTAINABILITY: SOCIAL

Social:

We believe that
businesses have a
valuable contribution
to make in the development of
societies that enable their
members to thrive



Our responsibility to our employees

We are dedicated to being a truly sustainable organisation and are keenly aware of our responsibility to our employees, the communities that we impact and the generations to come. By listening to our stakeholders (see pages 112 to 117) and taking action now, we are resolute in ensuring that we have a positive impact on the world around us.

We work hard to create a progressive business culture, keeping pace with rapid social change, and seeking to stay ahead of the curve on our key sustainability themes, while remaining respectful of the cultures of the countries that we operate in.

Our social sustainability agenda

Our social sustainability agenda comprises six key subject areas, as follows, where we have established strategies to support us in achieving our ambitions and targets:

- Culture, values and engagement
- Equality, diversity and inclusion
- Health, safety and wellbeing
- Investment in our people
- Next-generation talent
- Community impact.

Culture, values and engagement

Our purpose – to enable a greener, healthier, more connected advanced society – and our values, set out below, drive our approach to doing business, and help us build an open and inclusive culture, where colleagues feel able to share their views in a two-way dialogue with senior leaders. The Chair and Non-Executive Directors have regular informal meetings directly with staff at which a wide range of current workforce issues are discussed, and we hold regular Chief Executive town halls to which all employees are invited, and where they are encouraged to ask questions of the Chief Executive and senior leadership. Similar meetings are held by all business units, and by our regional teams based around the world. We also gather our people's views annually through our global engagement survey, monitoring a range of cultural KPIs and taking action on any opportunities for improvement at business unit, regional and Group level. Our overall engagement score was 78% (up 1%), comparing favourably with external benchmarking by Gallup indicating an average engagement rating of 21% globally across a range of sectors.

Our values



Inclusive

By seeking out different perspectives and diverse collaboration, we deliver better solutions and lasting success.



Innovative

Through our knowledge, expertise and focused curiosity, we create new possibilities for ourselves and for our customers.



Trusted

We build successful, long-term relationships based on accountability, integrity and respect.



Purposeful

We care, and our passion and commitment drive positive change in the world.

Equality, diversity and inclusion

We are committed to creating a diverse and inclusive culture right across Oxford Instruments, creating a sense of equality and belonging.

In everything we do, we seek to develop and sustain a supportive and collaborative working environment where difference is recognised, valued and celebrated, and where all our people feel able to be open about their own unique identity.

Equality, diversity and inclusion are important for all our people and society as a whole; however, we also recognise that we operate in 17 countries around the world in which the legislative frameworks and cultural landscapes vary hugely. In each of the countries in which we operate, we aim to be ahead of the curve in our equality, diversity and inclusion targets, and our working practices, but will ensure that we are not in conflict with legislative frameworks. We are pleased that 83% of respondents to our recent engagement survey feel everyone is treated with respect at Oxford

Instruments, and that more than three quarters feel we strive for a diverse mix of employees, but cognisant that there is no room for complacency.

We have identified several key areas of focus, including gender, ethnicity, disability, sexual orientation and gender identity, pursuing a range of initiatives to recruit from a diverse pool of talent, and to support our existing workforce. We have joined Business in the Community and the Business Disability Forum as part of our continual drive to improve our awareness and understanding of research and best practice in diversity and inclusion for businesses. We also engage in externally run schemes offering internships and career opportunities in our diversity and inclusion focus areas. During the year, employees have launched impact groups focusing on race and ethnicity and LGBTQ+ issues; these have been enthusiastically adopted by both members and allies of each community. In the

coming year, our plans include the launch of a women's group and a neurodiversity group.

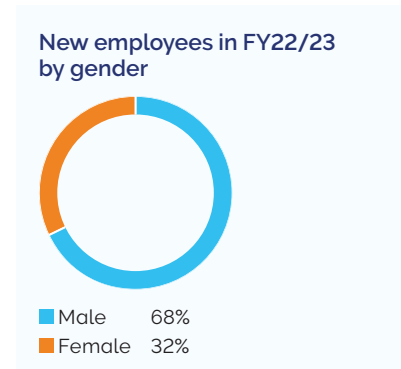
We are committed to eliminating our gender pay gap. We are only required to report in the UK, where the gap currently stands at 7.5% (mean) but are monitoring, measuring and taking action globally. We continue to build on the work we have done so far to establish balanced shortlists in our recruitment processes, only engaging executive search firms who have signed up to the Voluntary Code of Conduct on gender diversity. Our inclusive approach to recruitment includes the use of technology to ensure that the language used in job advertisements is free from gender bias. We have introduced e-learning for hiring managers, including a course on unconscious bias, and have also carried out training on interview and selection techniques, reaching some 40 managers in 2021/22.

SUSTAINABILITY: SOCIAL continued

Equality, diversity and inclusion continued

We have introduced a permanent hybrid working policy as a result of our learning throughout the pandemic which helps employees to better balance their work and personal commitments.

Following the reconfiguration of our internal employee data portals to include the Office for National Statistics ethnicity categories, some 70% of employees globally have provided data on their ethnicity. We are now beginning to use this data to help to ensure that our processes and pay are fair and equitable with respect to race and ethnicity, as well as the characteristics on which we have had full data for several years.



Gender split

	Male	Female
Global Oxford Instruments	74%	26%
Plc Board	62%	38%
Management Board	86%	14%
Managers	79%	21%
Employees	72%	28%

Gender split by region

	Male	Female
UK	77%	23%
Europe	69%	31%
Asia	70%	30%
America	70%	30%

Targets:

Objective	Target (with date if applicable)	Progress to date
Balanced shortlists for recruitment	100%	End of 2022/23: 83%
Ethnicity representation on the Board	By end of 2022/23: 1 person of colour	Following the appointment of Reshma Ramachandran as Non-Executive Director in September 2022, we have met this target
Women on the Board	By end of 2023/24: 40% women	With three of eight positions now held by women, we have exceeded the 33% target set by the Hampton-Alexander Review, and will meet the FTSE Women Leaders target of 40% of Board members being female when Professor Sir Richard Friend steps down from the Board in July 2023
Women as a proportion of senior leadership	By end 2025: 40% women	Currently 31%
Women as a proportion of total Oxford Instruments population	By end 2029/30, 30% women	Currently 26%

Health, safety and wellbeing

We are committed to achieving a high standard of health and safety for anyone involved in, or affected by, our activities. We strive to provide a safe workplace and working environment for all employees wherever they work.

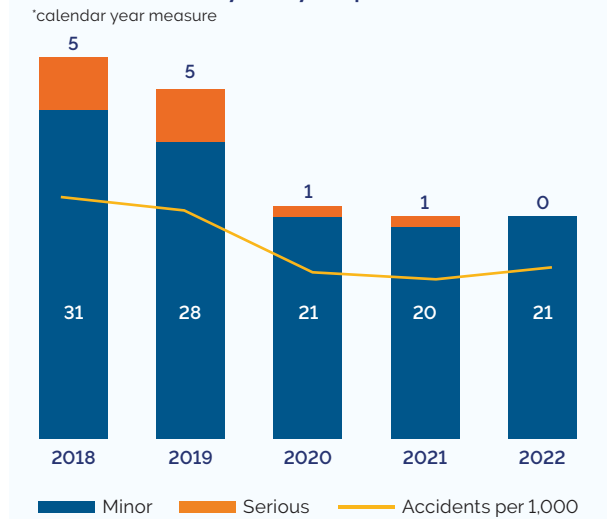
Our approach is based on the ongoing identification and control of risk. We focus on preventative measures to remove hazards before they can escalate into accidents or near misses. We apply safe working practices supported by structured health and safety management systems, that are externally audited where appropriate. We maintain ISO 45001 occupational health and safety certification at our four primary manufacturing sites, representing 83% of revenue. Each area of the business undergoes a health and safety audit at least every three years.

We have broadly maintained our overall accident frequency trend downwards, with no serious accidents in 2022, and a small increase in minor accidents. Our health and safety record compares favourably with industry benchmarks. However, there is no room for complacency, and health and safety is a priority at all our sites worldwide. We continue our Push for Zero programme, with the objective of a sustained reduction in accident levels across the Group. We record accidents and safety observations on our SHIELD health and safety software platform, and take corrective action to prevent recurrence.

Our new six-step strategic framework for health and safety will be rolled out globally in 2023/24



Health and safety five-year performance*



We take a holistic approach to wellbeing, and firmly believe employees and their families deserve to have access to the right mental health support to help them feel their best in a supportive culture. We aim to give people the tools to keep themselves, their colleagues and their families healthy; we encourage them to access support

when it's needed, and we empower people with long-term mental health issues or a disability to thrive in work. We continue to support our team of Mental Health First Aiders and provide independent and confidential digital platforms and services that employees can access wherever they are based in the world.

We are also committed to supporting colleagues experiencing tough times in their personal lives, whether through family commitments, illness or bereavement, taking a bespoke approach to each individual's circumstances.

Target:

Objective	Target	Comments
Serious accidents	Zero	No employees should experience a serious accident at work
Accident frequency rate	Continuous improvement	Push 4 Zero aims to reduce the accident rate year-on-year

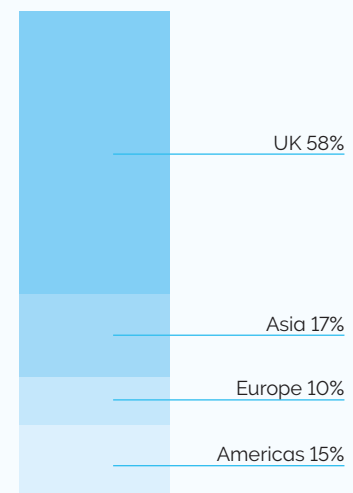
SUSTAINABILITY: SOCIAL continued

Employee turnover rates:

Year	Turnover
2022/23	9%
2021/22	11%
2020/21	6%
2019/20	7%
2018/19	10%
2017/18	12%

Geographical spread of employees

(at the end of FY 22/23)



Investing in our people

Our people and their capabilities are core to what makes us a great company. We want our employees to be successful, to realise their full potential and to be able to make a difference. We are committed to being the company where the best people in our sector want to work, and we offer high-quality, stable employment and flexible careers with favourable conditions and pay. We offer a broad range of career development opportunities across technical, commercial, operational and business support functions.

We provide a range of opportunities for our employees to gain knowledge, skills and experience to achieve individual and organisation goals. This includes challenging assignments, learning from colleagues and targeted training. Our talent management processes attract talented people and develop their capabilities to meet our current and future business needs. We integrate these processes within our business planning cycle.

We continue to strengthen our Oi Academy, which offers development programmes, core skills training courses and extensive e-learning opportunities. We also offer a broad range of secondments, career breaks, apprenticeships and support towards external qualifications. This year, three cohorts have undertaken our bespoke Oi Leadership programme, which brings together high-potential candidates from across the Group and covers a wide range of topics including interviewing skills, self-development, developing others, and managing remote teams.

We have developed indicative Career Pathways to deliver career mapping for all roles across the Group, allowing employees to utilise this information to review potential career pathways of interest to them across technical or functional leadership, business leadership and

specialist versus generalist routes. We have a robust system of regular feedback, embedded through our annual performance development review process for all employees, which also encompasses career development with a focus on training opportunities.

We are committed to building the skills that society needs now and in the future by investing, over the long term, in our people.

Next-generation talent

We take our responsibility towards developing the next-generation workforce seriously and are committed to inspiring the next generation of scientists, engineers and business people by showing them the difference they can make in the world, and by providing work experience and employment skills and development opportunities.

For us, this begins in schools, colleges and learning institutions, where we equip and encourage our employees around the world to take any opportunity they can to talk to young people about careers in our industry. We partner with universities and post-graduate schools to help students understand the range of careers available in a technology company, supporting this with work experience and engagement with employees from a broad range of backgrounds (see page 32). A popular benefit we offer all employees is the offer of work experience to family members between the ages of 16 and 25.

We remain committed to providing structured apprenticeships, sponsorships, internships, early career jobs and graduate programmes. We intentionally reach out to attract a diverse range of people and those from untapped talent pools, ensuring we are inclusive and accessible.

Community impact

We actively engage in locally focused activities that make our communities and environments a better place to live and work. All employees are offered up to two paid volunteering days a year to share their professional or practical skills in the community; we also participate in charity outreach programmes and offer sponsorship of local community events.

Our network of Go Green teams help us look at better ways to be more environmentally friendly, both as a business and as individuals. We have taken steps to minimise traffic noise and congestion around our sites and remain committed to minimising emissions from our own activities, as set out on pages 54 to 59. We have appointed a new senior manager to lead our environmental sustainability activity.

When we arrange gifts, celebrations, events and activities for our teams we aim to support the small, independent businesses near our sites.

During the year, across our sites, we organised a number of activities that supported our local businesses. This included bringing a barber on site, running exercise classes and dog walks. We also participated in a range of charity outreach activities, including raffles, marathon sponsorships, pub quizzes and coffee mornings.

CASE STUDY

Welcoming a record number of apprentices

February 2023 saw us launch our largest ever cohort of apprentices, with roles created at all four of our manufacturing sites in the UK. Our programme spans a wide range of disciplines, from engineering to software development and marketing, and with opportunities from post-school level to graduate level. We are delighted to be supporting a new generation of talented people through well-paid, high-quality training, equipping them with skills and qualifications for life. For more information, visit www.oxinst.com/apprenticeships

SUSTAINABILITY: GOVERNANCE

Governance:

We are committed to upholding high ethical standards; we all want to work for a company of which we can be proud



Inclusive, innovative, trusted and purposeful

We are wholly committed to conducting our business responsibly and holding ourselves to a high ethical standard. Our brand and reputation are built on our strong values, which underpin everything we do; from how we work with each other and how we support our customers, to how we trade with suppliers. We are inclusive, innovative, trusted and purposeful (see page 73). Every Oxford Instruments employee is expected to behave in a way which is consistent with these values.

Following best practice

In our governance practices, we address the wide range of corporate activities we undertake, the policies we have in place and our management structure. These are summarised in our Code of Business Conduct and Ethics, which is updated regularly, issued to all new joiners and communicated regularly to existing employees. We strive to adapt to the changing landscapes we operate within, with the goal of ensuring that we always operate within the bounds of best practice.

Our governance sustainability agenda comprises eight key areas.

Anti-bribery and anti-corruption

When dealing with business partners, suppliers and customers, or when engaging with public officials, we expect our employees to act in a transparent and fair manner. We choose our business partners and suppliers carefully and avoid working with anyone who does not meet and adhere to the same high standards.

The key principles we expect everyone to follow include not offering or accepting bribes or improper payments; not improperly influencing any individual; and not participating in any kind of corrupt business activity, either directly or through a third party. To help our employees understand what is expected of them we have developed a comprehensive training course which all new joiners must complete to pass their probationary period, and which all those in relevant roles must retake regularly; we also maintain a detailed policy document.

Adherence to our due diligence procedure for the onboarding of third-party agents and distributors continues to be regularly audited, and training is delivered by our Group Legal team to all new Finance Directors and Contract Managers.

Sanctions, export control and customs

We review our Sanctions Policy regularly to confirm compliance with UN, UK, EU and US sanctions; and following Russia's invasion of Ukraine have exceeded the scope of international sanctions by imposing a Group-wide ban on any transactions involving Russia and Belarus.

We have adapted our processes to respond to changes in UK legislation relating to export controls, which became effective in May 2022, and which had the effect of formally extending military end-use controls to China (including Macau and Hong Kong) beyond military organisations to encompass the police, intelligence services and similar organisations and entities that supply them.

During the year the Group Export Compliance team has standardised operating procedures for all UK businesses, including enhanced due diligence around identification of end users in China, and has instigated quarterly compliance audits. To date these audits have indicated 100% compliance with procedure.

Dissemination of inside information to the market, and share dealing

We take steps to ensure our compliance with the obligations arising from the Listing Rules, Disclosure Guidance and Transparency Rules, the Criminal Justice Act 1993 and the UK Market Abuse Regulation ('MAR') in relation to the dissemination of inside information to the market, which includes our share dealing policy and procedures.

We ensure that there are adequate procedures, systems and controls: (i) to identify inside information and ensure that any inside information identified is properly considered by the Directors and, where necessary, disclosed to the market promptly; (ii) to enable the Directors to assess whether the company can delay disclosure to the market; (iii) to restrict access to inside information to those who need to know it; (iv) to monitor compliance with our obligations under MAR, including the detailed record-keeping requirements; and (v) to ensure that the Financial Conduct Authority is notified of any delayed disclosure on announcement of the inside information to the market.

We maintain and update a secure list of anyone who has access to inside information, whether on a regular or occasional basis, and ensure that anyone working on our behalf or on our account does the same. We ensure that those on the list are aware of and acknowledge the legal and regulatory duties required of them while on the list.

The Company Secretariat is responsible for ensuring compliance in this area.

Supply chain responsible sourcing

We operate our business in compliance with applicable laws and regulations and we expect our suppliers to do the same. Our expectations are set out in our Code of Conduct for Representatives and Suppliers, which is available on our website: www.oxinst.com.

In addition, we endeavour to include a provision within our purchase contracts with suppliers, whereby suppliers are asked to warrant that they and their sub-contractors will comply with all applicable laws, statutes, regulations and codes relating to modern slavery, anti-bribery and anti-corruption, and Oxford Instruments' Code of Conduct for Representatives and Suppliers.

We use an approved vendor list for the supply of continuous-use production materials, which is managed by Group Strategic Sourcing. All key suppliers on this list must complete a governance questionnaire via an online supplier portal, to confirm their compliance with our Code of Conduct for Representatives and Suppliers, together with applicable legislation. In the year we have focused on ensuring that we have up-to-date governance questionnaires for all key suppliers.

SUSTAINABILITY: GOVERNANCE continued

We are committed to sourcing our supplies responsibly and supporting global efforts to eliminate the use of so-called 'conflict minerals', sourced from mines which support or fund conflict. We undertake due diligence on our key suppliers and expect them, in turn, to conduct due diligence on their own supply chain to help eliminate the use of conflict minerals.

Our online supplier portal allows us to store and audit our key supplier documents and is being extended to collect information on product environmental compliance, quality and sustainability. During the year our Group Strategic Sourcing team has worked closely with WITec to align their policies and processes with the rest of the Group.

Human rights and modern slavery

We are committed to preventing acts of modern slavery and human trafficking from occurring within our business and supply chain. We take a zero-tolerance approach to all forms of modern slavery, including servitude, forced bonded and compulsory labour, and human trafficking.

Bespoke training is mandatory for relevant employees to help them recognise where there may be risks of modern slavery and human trafficking within our business and our supply chains. The training has recently been updated to specifically reference the International Labour Organisation's 11 indicators of forced labour and explains how they can be used to help identify victims of modern slavery.

We have an established Reporting a Business Malpractice Procedure for employees to report any concerns, and further guidance is also made available in our Global Human Rights Policy. We encourage employees to use both documents in their due diligence of suppliers.

In addition, our global Code of Business Conduct and Ethics, referenced on pages 78 and 81, sends a clear message to our employees, business partners, investors and other stakeholders about our business principles and ethics.

Our Board Sustainability Committee, chaired by Sir Nigel Sheinwald (see pages 141 to 143), provides a direct overview of our Environmental, Social, and Governance ('ESG') agenda. Modern Slavery prevention is one of the eight key areas under the Governance section of the ESG agenda and accordingly has the full focus of the Sustainability Committee.

Our Corporate and Social Responsibility Forum has helped to develop a 'Supplier Portal' which provides an online tool to help us better undertake and audit supplier due diligence.

Our Anti-Slavery and Human Trafficking Statement is updated annually and can be found both on our website and on the Government's Modern Slavery Statement Registry.

Intellectual property and confidentiality

Our intellectual property (IP) is one of our most important assets; it is key to our success in the market and enables us to secure and maintain a competitive advantage. We have comprehensive policies and procedures in place to protect our IP.

We continue to protect our inventions, brand and designs through the use of registered IP rights. In the year we filed a number of new priority patent applications.

As the basis for protecting our trade secrets we have in place a well established process for preparation, review and signing of all confidentiality agreements. All employees are able to download a standard set of templates, along with guidance and training on how to complete these templates on our internal SharePoint pages.

Oxford Instruments often collaborates with third parties on projects which generate new IP, further enhancing our product offerings to our customers. In these situations, we will not use any IP without it first being legitimately acquired or licensed.

Data protection, data privacy and data security

Our global privacy standard sets out the principles that guide our approach to handling personal information, and all employees are required to undertake mandatory training on data protection.

We continue to run training sessions to ensure that marketing lead generation and other marketing activities are compliant with the European General Data Protection Regulation ('GDPR'), UK GDPR and related privacy legislation in other territories. Over the year our legal team has worked closely with our marketing and IT teams, providing data protection support on projects including the rollout of a new global CRM system and service portal, and changes in IT software providers.

From September 2022, a change in the law resulted in the need to use a new UK version of the standard contractual clauses to govern our cross-border transfers of personal data outside the UK. We have commenced a project to update existing contracts between our subsidiaries within the Group and also with third party suppliers and partners before the end of the grace period in March 2024. Similar legislation and guidance regarding cross-border transfer of personal data outside of China has recently been released and we are reviewing our data protection compliance programme in China to ensure we are ready for these changes before the end of the grace period later this year.

We continue to stay on top of developing compliance programmes around the world to ensure we can respond quickly to any changes made in the data protection legislation. During the year, we worked with local lawyers in Japan to update policies and procedures following amendments to the local data protection regime, and have also delivered a compliance programme covering regional data protection changes in the US.

Financial sustainability and tax transparency

The Group continues to maintain a focus on cash generation to ensure we are financially stable and we have published our policy within the Sustainability section of our website.

We manage our tax affairs in accordance with the following objectives:

- ensuring compliance with all relevant tax law in all jurisdictions in which the Group operates whilst managing the associated tax costs in a manner that is consistent with our Code of Business Conduct and Ethics and its attitude to commercial risk;
- seeking to maintain stable effective and cash tax rates which reflect the geographic markets in which we operate, and the Group's tax attributes, such as brought-forward losses and special deductions such as for research and development; and
- ensuring that all communication with tax authorities is conducted in a transparent and professional manner.

CASE STUDY

A strong ethical foundation

At Oxford Instruments we strive to be inclusive, innovative, trusted and purposeful. These values underpin everything we do; from how we work with each other and the way we support our customers to how we interact with our suppliers. To that end, and in order to reflect our ongoing strong progress on environmental, social and governance issues, we significantly updated our global Code of Business Conduct and Ethics in the year. The Code sets out our values and the standards we expect all colleagues to uphold, and plays an important role in reinforcing the positive and responsible culture we seek to build.



FINANCE REVIEW

Strong growth and investment for the future

We delivered a strong financial performance with growth in orders, revenue and underlying cash flow. We continue to invest in resources and infrastructure across the business to support future growth. Our balance sheet has been strengthened further to support organic and non-organic growth opportunities.



“With order, revenue and profit growth we have delivered strong performance in the year and strengthened our balance sheet to support future growth opportunities.”

Gavin Hill
Chief Financial Officer

Summary

Oxford Instruments uses certain alternative performance measures to help it effectively monitor the performance of the Group as management believes that these represent a more consistent measure of underlying performance. Adjusted measures exclude the amortisation and impairment of acquired intangible assets; other significant non-recurring items; and the mark-to-market movement of financial derivatives. All of these are included in the statutory figures. Note 1 provides further analysis of the adjusting items in reaching adjusted profit measures. Definitions of the Group's material alternative performance measures along with reconciliation to their equivalent IFRS measure are included within the Finance Review.

The Group trades in many currencies and makes reference to constant currency numbers to remove the impact of currency effects in the year. These are prepared on a month-by-month basis using the translational and transactional exchange rates which prevailed in the previous year rather than the actual exchange rates which prevailed in the year. Transactional exchange rates include the effect of our hedging programme.

Reported orders received increased by 20.9% to £511.6m (2022: £423.1m), an increase of 14.2% at constant currency. 60% of orders growth was volume driven, with the remainder from price increases. At the end of the year, the Group's order book had increased to £319.6m (31 March 2022: £260.2m), up 22.8% on a reported basis and 19.2% at constant currency.

Reported revenue increased by 21.1% to £444.7m (2022: £367.3m). Revenue, excluding currency effects, increased by 14.0%, with the movement in average currency exchange rates over the year increasing reported revenue by £26.1m. This strong growth was primarily volume driven with 70% of the growth from volume and 30% from price.

Adjusted operating profit increased by 21.4% to £80.5m (2022: £66.3m). Adjusted operating profit, excluding currency effects, increased by 13.4%, with a currency tailwind in the year of £5.3m. Adjusted operating margin was held at 18.1% (2022: 18.1%) as the business invested to support growth; excluding currency effects, adjusted operating margin decreased by 10 basis points to 18.0%.

Statutory operating profit of £72.4m (2022: £48.3m) includes the amortisation of acquired intangibles of £9.3m (2022: £9.5m) and a credit of £3.0m (2022: charge of £6.4m) relating to the movement in the mark-to-market valuation of uncrystallised currency hedges for future years. Other adjusting non-recurring items totalled £1.8m (2022: £2.1m).

Adjusted profit before tax grew by 24.4% to £82.0m (2022: £65.9m), representing a margin of 18.4% (2022: 17.9%).

Statutory profit before tax increased by 54.4% to £73.5m (2022: £47.6m), following the growth in operating profit and favourable impact from the non-cash uncrystallised credit on currency hedges. This represents a margin of 16.5% (2022: 13.0%).

Adjusted basic earnings per share grew by 19.5% to 112.7p (2022: 94.3p). Basic earnings per share were 101.6p (2022: 67.1p), an increase of 51.4%.

Cash from operations of £72.9m (2022: £58.4m) represents 58% (2022: 72%) cash conversion. During the year, we incurred expenditure of £24.7m on the construction of our new semiconductor facility near Bristol and a facility expansion in High Wycombe; cash conversion on a normalised basis that excludes this expenditure was 88%. Net cash after borrowings increased from £85.9m on 31 March 2022 to £100.2m on 31 March 2023.

At the end of March, our revolving credit facility remained undrawn, leaving approximately £108m of committed facilities. This represents total headroom of just under £210m.

FINANCE REVIEW continued

Income Statement

The Group's Income Statement is summarised below.

	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m	Change
Revenue	444.7	367.3	+21.1%
Adjusted operating profit	80.5	66.3	+21.4%
Amortisation of acquired intangible assets	(9.3)	(9.5)	
Non-recurring items	(1.8)	(2.1)	
Mark-to-market of currency hedges	3.0	(6.4)	
Statutory operating profit	72.4	48.3	+49.9%
Net finance income/(cost) ¹	1.1	(0.7)	
Adjusted profit before taxation	82.0	65.9	+24.4%
Statutory profit before taxation	73.5	47.6	+54.4%
Adjusted effective tax rate	20.7%	17.8%	
Effective tax rate	20.3%	18.9%	
Adjusted earnings per share – basic	112.7p	94.3p	+19.5%
Earnings per share – basic	101.6p	67.1p	+51.4%
Dividend per share (total)	19.5p	18.1p	+7.7%

1. Net finance costs for 2023 include a non-recurring charge of £0.4m (2022: £0.3m) against the unwind of discount on WITec contingent consideration.

Revenue and orders

Total reported orders grew by 20.9% (+14.2% at constant currency) to £511.6m. In Materials & Characterisation, reported orders grew by 24.5% (+18.3% at constant currency), with good growth across the portfolio of electron microscope analysers, semiconductor processing systems, atomic force microscopes and Raman systems. In Research & Discovery, we saw good growth of 19.8% (+11.6% at constant currency) in orders for our optical imaging and microscopy systems, assisted by some large orders for our cryogenic systems. Service & Healthcare increased by 12.0% (+6.4% at constant currency).

Reported revenue of £444.7m (2022: £367.3m) increased by 21.1% (+14.0% at constant currency).

Reported revenue grew by 26.4% for Materials & Characterisation (+19.2% at constant currency), with strong growth for our electron microscope analysers and atomic force microscopes. We saw growth in our semiconductor processing tools, though this was tempered in the year by supply chain challenges and an increase in export licence refusals.

Research & Discovery reported revenue growth of 15.9% (+8.1% at constant currency) was supported by improved second half production of our optical imaging and microscopy products, although there was lower revenue from the unfavourable phasing in installations of our cryogenic and magnet systems, in addition to the impact from UK export licence constraints to China, particularly to the quantum market.

Revenue growth from service of our own products, supported by good growth in maintenance revenue from Life Science software and products, has more than offset an expected small decline in revenue from our MRI service business in Japan, resulting in reported growth of 15.1% (+9.6% at constant currency) for Service & Healthcare.

The book-to-bill ratio (orders received to goods and services billed in the period) for the year was 1:15 (2022: 1:15).

On a geographical basis, revenue grew by 17.9% in Europe (+15.5% at constant currency), supported by additional deliveries of our electron analysers, optical and microscopy products and cryogenic systems.

Revenue for North America increased by 53.5% on a reported basis and by 36.3% at constant currency, with all businesses recording good growth, and especially high demand for our semiconductor processing systems.

Asia remains our largest region by revenue, with China constituting 54% of regional revenue and 24% of total Group revenue. Asia delivered revenue growth of 6.7% (+1.9% at constant currency), with strong demand for our electron microscope analysers and atomic force microscopes, offset by fewer deliveries of our semiconductor processing systems due to supply chain challenges and UK export licence rejections, and a pivot away from quantum-related cryogenic systems caused by export licence constraints. Revenue in China fell 4% on a constant currency basis.

Geographic revenue growth

£m	2022/23 £m	2022/23 % of total	2021/22 £m	2021/22 % of total	Change £m	% growth	% growth at constant currency
Europe	104.9	24%	89.0	24%	+15.9	17.9%	15.5%
North America	130.3	29%	84.9	23%	+45.4	53.5%	36.3%
Asia	201.2	45%	188.6	51%	+12.6	6.7%	1.9%
Rest of World	8.3	2%	4.8	2%	+3.5	72.9%	66.7%
	444.7		367.3		+77.4	21.1%	14.0%

The total reported order book grew by 22.8% (+19.2% at constant currency). The order book, at constant currency, compared to 31 March 2022, increased by 29.5% for Materials & Characterisation, with strong growth across all constituent businesses. Research & Discovery grew by 7.7% at constant currency, with strong demand for our imaging and microscopy products. We also received a large commercial order for cryogenic systems. However, the removal of previous years' orders due to UK export licence rejections to China within the quantum sector depressed the growth rate. Continued focus on own product service resulted in growth of 25.3% (+21.0% at constant currency) from Service & Healthcare.

£m	Materials & Characterisation	Research & Discovery	Service & Healthcare	Total
Revenue: 2021/22	185.5	120.3	61.5	367.3
Constant currency growth	35.6	9.8	5.9	51.3
Currency	13.4	9.3	3.4	26.1
Revenue: 2022/23	234.5	139.4	70.8	444.7
Revenue growth: reported	26.4%	15.9%	15.1%	21.1%
Revenue growth: constant currency	19.2%	8.1%	9.6%	14.0%

FINANCE REVIEW continued

Gross profit

Gross profit grew by 22.6% to £230.2m (2022: £187.8m), representing a gross profit margin of 51.8%, an increase of 70 basis points over last year. The business has been able to offset the effects of cost inflation within costs of sales over the year.

Adjusted operating profit and margin

Adjusted operating profit increased by 21.4% to £80.5m (2022: £66.3m), representing an adjusted operating profit margin of 18.1% (2022: 18.1%). At constant currency, the adjusted operating profit margin was 18.0%, a reduction of 10 basis points. In order to support future growth ambitions and position ourselves to deliver process and cost efficiencies we must invest across the business, including in infrastructure, IT, and engineering and operational capabilities. As a result overhead growth tracks revenue growth and offsets short-term pass through margin enhancement.

Reported Materials & Characterisation adjusted operating profit increased by 55.0% (+45.2% at constant currency) with reported margin increasing by 320 basis points to 17.3% (2022: 14.1%). We have seen a high level of demand for our electron microscope analysers and atomic force microscopes, driving an improvement in profitability. In addition, the WITec business has been fully integrated into the Group, with combined sales teams driving an improvement in demand.

Within Research & Discovery, our imaging and microscopy business has had a strong second half of the year, despite a large increase in UK export licence rejections. The business has seen strong demand, supported by our new benchtop microscope for the Life Science market. Investment in resources, IT systems and infrastructure is being made to support the capture and delivery of growth opportunities. Operational throughput of our standard cryogenic and magnet systems has been constrained by a diversion of resources towards completing the withdrawal from more complex bespoke systems, which now make up a much smaller component of the business. Difficulties in obtaining UK export licences for cryogenic systems for quantum research in China have negatively impacted year-on-year growth. These issues have resulted in a fall in constant currency profit of 21.1% and a 480-basis point reduction in adjusted operating margin to 12.9% for the segment. Good order growth for our cryogenic systems, especially from North America and Europe, is expected to contribute to an improved trading performance for the 2023/24 financial year.

Service & Healthcare margin increased by 40 basis points to 31.1% (2022: 30.7%). At constant currency, the margin was 30.4%, a decrease of 30 basis points.

Transaction and translation currency effects (including the impact of transactional currency hedging) have increased reported adjusted operating profit by £5.3m when compared to blended hedged exchange rates for the prior period.

£m	Materials & Characterisation	Research & Discovery	Service & Healthcare	Total
Adjusted operating profit: 2021/22	26.1	21.3	18.9	66.3
Constant currency growth	11.8	(4.5)	1.6	8.9
Currency	2.6	1.2	1.5	5.3
Adjusted operating profit: 2022/23	40.5	18.0	22.0	80.5
Adjusted operating margin ¹ : 2021/22	14.1%	17.7%	30.7%	18.1%
Adjusted operating margin ¹ : 2022/23	17.3%	12.9%	31.1%	18.1%
Adjusted operating margin ¹ (constant currency): 2022/23	17.1%	12.9%	30.4%	18.0%

1. Adjusted margin is calculated as adjusted operating profit divided by revenue. Adjusted margin at constant currency is defined as adjusted operating profit at constant currency divided by revenue at constant currency.

Statutory operating profit and margin

Statutory operating profit grew by 49.9% to £72.4m (2022: £48.3m), representing an operating profit margin of 16.3% (2022: 13.2%). Statutory operating profit is after the amortisation and impairment of acquired intangible assets; other significant non-recurring items; and the mark-to-market of financial derivatives. The growth was driven by a strong trading performance, supported by currency, along with a credit on the fair value movement of forward currency contracts.

Adjusting items

Amortisation of acquired intangibles of £9.3m (2022: £9.5m) relates to intangible assets recognised on acquisitions, being the value of technology, customer relationships and brands.

Non-recurring items within operating profit total £1.8m. This comprises a release of a property dilapidations provision of £0.4m relating to the previously disposed OI Healthcare business, offset by a charge of £0.5m that eliminates the profit arising in the acquired WITec business from revaluing their inventories to fair value, in accordance with accounting standards. We have also incurred legal costs of £0.5m on protection of our intellectual property due to a third-party infringement, and restructuring costs of £0.4m relating to the transfer of a business to a new location. An impairment of capitalised development costs of £0.8m relates to two small projects in our Plasma Technology business where the development has been superseded by a new platform and the market opportunity turned out to be smaller than forecast.

We also recorded in financial expenditure a non-recurring charge of £0.4m against the unwind of discount on WITec contingent consideration.

The Group uses derivative products to hedge its short-term exposure to fluctuations in foreign exchange rates. Our hedging policy allows for forward contracts to be entered into up to 24 months forward from the end of the next reporting period. The Group policy is to have in place at the beginning of the financial year hedging instruments to cover up to 80% of its forecast transactional exposure for the following 12 months and, subject to pricing, up to 20% of exposures for the next six months. The Group has decided that the additional costs of meeting the extensive documentation requirements of IFRS 9 to apply hedge accounting to these foreign exchange hedges cannot be justified. Accordingly, the Group does not use hedge accounting for these derivatives.

Net movements on mark-to-market derivatives in respect of transactional currency exposures of the Group in future periods are disclosed in the Consolidated Statement of Income as foreign exchange and excluded from our calculation of adjusted profit before tax. In the year this amounted to a credit of £3.0m (2022: charge of £6.4m). The movement to a small net asset for derivative financial instruments over the year reflects: (i) the crystallisation of forward contracts that were hedging the 2022/23 financial year, which are recognised in adjusted operating profit; and an uncrystallised increase in the mark-to-market valuation of forward contracts from a rise in the value of sterling at the balance sheet date against a blended rate achieved on US dollar contracts that will mature over the next 12 months.

Net finance costs

The Group recorded adjusted net interest income of £1.5m (2022: net cost of £0.4m) due to an increase in the interest credit on pension scheme net assets and a rise in interest income on our net cash balance. In addition, we recorded in financial expenditure a non-recurring charge of £0.4m against the unwind of discount on WITec contingent consideration.

FINANCE REVIEW continued

Adjusted profit before tax and margin

Adjusted profit before tax increased by 24.4% to £82.0m (2022: £65.9m). The adjusted profit before tax margin of 18.4% (2022: 17.9%) was above last year due to an increase in the net finance income.

Reconciliation of statutory profit before tax to adjusted profit before tax	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m
Statutory profit before tax	73.5	47.6
Add back:		
Amortisation and impairment of acquired intangible assets	9.3	9.5
Non-recurring items in operating profit (Note 1)	2.2	2.4
Mark-to-market of currency hedges	(3.0)	6.4
Adjusted profit before tax	82.0	65.9

Statutory profit before tax and margin

Statutory profit before tax increased by 54.4% to £73.5m (2022: £47.6m). Statutory profit before tax is after the amortisation and impairment of acquired intangible assets; other significant non-recurring items; and the mark-to-market of financial derivatives. The statutory profit before tax margin of 16.5% (2022: 13.0%) was above last year principally due to the credit from the mark-to-market valuation movement on financial derivatives.

Taxation

The adjusted tax charge of £17.0m (2022: £11.7m) represents an effective tax rate of 20.7% (2022: 17.8%). The tax charge of £14.9m (2022: £9.0m) represents an effective tax rate of 20.3% (2022: 18.9%). The increase reflects prior year tax credits, primarily relating to exercise of share options, as well as a greater mix of profits from jurisdictions with higher tax rates than our average. We expect the effective tax rate to rise in 2023/24 owing to the increase in the UK corporation tax rate.

Earnings per share

Adjusted basic earnings per share increased by 19.5% to 112.7p (2022: 94.3p); adjusted diluted earnings per share grew by 19.7% to 111.3p (2022: 93.0p). Basic earnings per share increased by 51.4% to 101.6p (2022: 67.1p); diluted earnings per share increased by 51.5% to 100.3p (2022: 66.2p).

The number of undiluted weighted average shares increased to 57.7m (2022: 57.5m).

Currency

The Group faces transactional and translational currency exposure, most notably against the US dollar, euro and Japanese yen. For the year, approximately 16% of Group revenue was denominated in sterling, 53% in US dollars, 19% in euros, 10% in Japanese yen and 2% in other currencies. Translational exposures arise on the consolidation of overseas company results into sterling. Transactional exposures arise where the currency of sale or purchase transactions differs from the functional currency in which each company prepares its local accounts.

The Group's translation and transaction foreign currency exposure for the full year is summarised below.

£m (equivalent)	Revenue	Adjusted operating profit
Sterling	72.3	(97.9)
US dollar	233.8	105.8
Euro	85.8	37.4
Japanese yen	43.5	34.4
Chinese renminbi	6.2	(0.2)
Other	3.1	1.1
	444.7	80.5

The Group maintains a hedging programme against its net transactional exposure using internal projections of currency trading transactions expected to arise over a period extending from 12 to 24 months. As at 31 March 2023, the Group had currency hedges in place extending up to 12 months forward.

For the full year 2023/24, our assessment of the currency impact is, based on hedges currently in place and forecast currency rates, a headwind of £12.0m to revenue and a broadly neutral impact on profit. Current currency rates on unhedged positions for the year are GBP:USD 1.25; GBP:EUR 1.16; GBP:JPY 175. All currency impacts are prior to mitigating pricing and cost actions. Uncertain volume and timing of shipments and acceptances, currency mix and rate volatility may significantly affect full-year currency forecast effects.

Looking further ahead to the financial year 2024/25, based on current currency rates, we would expect currency effects to have a neutral impact to revenue and a £3.6m headwind to profit, owing to an unwind of hedges crystallising in the previous financial year at more favourable rates.

Acquisition of WITec

On 31 August 2021, the Group completed the purchase of 100% of the share capital in WITec for an initial consideration of €37.0m. Additional consideration of €5m was paid in December 2022 as a consequence of specific conditions on trading performance being met.

Dividend

The Group's policy on the dividend takes into account changes to underlying earnings, dividend cover, movements in currency and demands on our cash. After a good year of trading, supported by favourable currency movements, the Board has proposed a final dividend of 14.9p (2022: 13.7p) per share. This results in a total dividend of 19.5p (2022: 18.1p) per share, growth of 7.7%. An interim dividend of 4.6p per share was paid on 13 January 2023. The final dividend will be paid, subject to shareholder approval, on 12 October 2023 to shareholders on the register as at 4 August 2023.

Cash flow

The Group cash flow is summarised below.

	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m
Adjusted operating profit	80.5	66.3
Depreciation and amortisation	10.8	9.4
Adjusted¹ EBITDA	91.3	75.7
Working capital movement	(9.1)	(11.8)
Equity settled share schemes	2.4	2.1
Pension scheme payments above charge to operating profit	(11.7)	(7.6)
Cash from operations	72.9	58.4
Interest	0.4	(0.5)
Tax	(5.7)	(8.8)
Capitalised development expenditure	(0.6)	(0.7)
Net expenditure on tangible and intangible assets	(32.1)	(13.9)
Acquisition of subsidiaries, net of cash acquired	(4.8)	(30.6)
Acquisition-related costs	-	(0.4)
Dividends paid	(10.6)	(12.3)
Proceeds from issue of share capital and exercise of share options	0.1	0.1
Payments made in respect of lease liabilities	(5.6)	(3.4)
Decrease in borrowings	(0.5)	(0.1)
Net increase/(decrease) in cash and cash equivalents from continuing operations	13.5	(12.2)

1. Adjusted EBITDA is defined as Adjusted operating profit before depreciation and amortisation of capitalised development costs. The Consolidated Statement of Cash Flows provides further analysis of the definition of Adjusted EBITDA.

FINANCE REVIEW continued

Cash from operations

Cash from operations of £72.9m (2022: £58.4m) represents 58% (2022: 72%) cash conversion. Cash conversion on a normalised basis was 88% once we exclude capital expenditure relating to our new semiconductor facility and a small facility expansion in High Wycombe for a Materials & Characterisation business line. Cash conversion is defined as cash from operations before business reorganisation costs and pension scheme payments above charge to operating profit, less capitalised development expenditure, capital expenditure and payments made in respect of lease liabilities, divided by adjusted operating profit.

	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m
Reconciliation of cash generated from operations to adjusted operating cash flow		
Cash from operations	72.9	58.4
Add back/(deduct):		
Pension scheme payments above charge to operating profit	11.7	7.6
Capitalised development expenditure	(0.6)	(0.7)
Net expenditure on tangible and intangible assets	(32.1)	(13.9)
Payments made in respect of lease liabilities	(5.6)	(3.4)
Adjusted cash from operations	46.3	48.0
Cash conversion % (adjusted cash from operations/adjusted operating profit)	58%	72%
Cash conversion % (normalised¹)	88%	84%

1. Cash conversion calculated on a normalised basis excludes expenditure in the year of £24.7m (2022: £7.4m) on the new semiconductor facility and the Materials & Characterisation facility expansion in High Wycombe.

Working capital increased by £9.1m. Inventories increased by £15.6m as we prioritised securing component supplies in the face of continued supply chain disruption and uncertainty. Receivables increased by £21.5m, reflecting the high number of orders, shipments and acceptances in the final month of the year compared to last year, particularly with reference to high-value semiconductor process systems, resulting in an increase in invoicing against customer deposits, installation and acceptances. This was offset by an increase in payables and customer deposits of £28.0m.

Interest

Net interest received was £0.4m (2022: £0.5m paid), the improvement reflecting the higher interest income received on our net cash balance.

Tax

Tax paid was £5.7m (2022: £8.8m). The Group benefitted from accelerated capital allowances on the new semiconductor facility currently under construction, partly contributing to cash tax being lower than the accounting charge.

Investment in Research and Development (R&D)

Total cash spend on R&D in the year was £34.8m, equivalent to 7.8% of sales (2022: £31.7m, 8.6% of sales). A reconciliation between the adjusted amounts charged to the Consolidated Statement of Income and the cash spent is given below:

	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m
R&D expense charged to the Consolidated Statement of Income	36.7	32.8
Depreciation of R&D-related fixed assets	(0.3)	(0.2)
Amounts capitalised as fixed assets	-	0.3
Amortisation and impairment of R&D costs previously capitalised as intangibles	(2.2)	(1.9)
Amounts capitalised as intangible assets	0.6	0.7
Total cash spent on R&D during the year	34.8	31.7

Net cash and funding

Net cash

Cash from operations in the year was partially offset by an increase in capital expenditure and payment of deferred consideration for the acquired WITec business, resulting in an increase in the Group's net cash position after borrowings at 31 March 2023 to £100.2m (31 March 2022: £85.9m). The Group invested in tangible and intangible assets of £32.3m, of which £23.1m relates to payments associated with the new semiconductor facility under construction.

To 31 March 2023, we had incurred costs of £31.3m on the new semiconductor facility under construction. For the financial year ended 31 March 2024, we expect additional payments of approximately £10m to complete the facility. We are also planning to expand our operations in Belfast over the next 18 months to support the growth of our imaging and microscopy business, particularly into Life Science markets.

	£m
Movement in net cash	
Net cash after borrowings as at 31 March 2022	85.9
Cash generated from operations	72.9
Interest	0.4
Tax	(5.7)
Capitalised development expenditure	(0.6)
Capital expenditure on tangible and intangible assets	(9.2)
Capital expenditure on new semiconductor facility	(23.1)
Acquisition of subsidiaries	(4.8)
Dividend paid	(10.6)
Payments made in respect of lease liabilities	(5.6)
Other items	0.6
Net cash after borrowings as at 31 March 2023	100.2

	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m
Net cash including lease liabilities		
Net cash after borrowings	100.2	85.9
Lease liabilities	(31.4)	(18.4)
Net cash and lease liabilities after borrowings	68.8	67.5

Return on capital employed (ROCE)

ROCE measures effective management of capital employed relative to the profitability of the business. ROCE is calculated as adjusted operating profit less amortisation of intangible assets divided by average capital employed. Capital employed is defined as assets (excluding cash, pension, tax and derivative assets) less liabilities (excluding tax, debt and derivative liabilities). Average capital employed is defined as the average of the closing balance at the current and prior year end. ROCE has risen to 35.2%, (2022: 34.7%), with the change principally reflecting a higher level of earnings, partially offset by the investment in the new semiconductor facility in Bristol which has increased property, plant and equipment, and right-of-use assets.

FINANCE REVIEW continued

	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m
Return on capital employed		
Adjusted operating profit	80.5	66.3
Amortisation of acquired intangible assets	(9.3)	(9.5)
Adjusted operating profit after amortisation of acquired intangible assets	71.2	56.8
Property, plant and equipment	59.3	31.7
Right-of-use assets	31.4	17.9
Intangible assets	132.1	140.7
Long-term receivables	0.5	-
Inventories	81.4	65.3
Trade and other receivables	113.2	94.8
Non-current lease payables	(26.2)	(14.9)
Non-current provisions	-	(0.1)
Trade and other payables	(159.4)	(139.6)
Current lease payables	(5.2)	(3.5)
Current provisions	(7.6)	(7.7)
Capital employed	219.5	184.6
Average capital employed	202.1	163.5
Return on capital employed (ROCE)	35.2%	34.7%

Return on invested capital (ROIC)

ROIC measures the after-tax return on the total capital invested in the business. It is calculated as adjusted operating profit after tax divided by average invested capital. Invested capital is total equity less net cash, including lease liabilities. Average invested capital is defined as the average of the closing balance at the current and prior year end. Oxford Instruments aims to deliver high returns, measured by a return on capital in excess of our weighted average cost of capital. ROIC fell slightly on the previous year due to an increase in property assets and leases offsetting the positive effect of growth in adjusted operating profit after taxation.

	Year ended 31 March 2023 £m	Year ended 31 March 2022 £m
Return on invested capital		
Adjusted operating profit	80.5	66.3
Adjusted taxation	(17.0)	(11.7)
Adjusted operating profit after taxation	63.5	54.6
Total equity	344.0	316.4
Net cash after borrowings (including lease liabilities)	(68.8)	(67.5)
Invested capital	275.2	248.9
Average invested capital	262.1	212.5
Return on invested capital (ROIC)	24.2%	25.7%

Funding

On 2 July 2018, the Group entered into an unsecured multi-currency revolving facility agreement, which is committed until June 2025. The facility has been entered into with two banks and comprises a euro-denominated multi-currency facility of €50.0m (£44m) and a US dollar-denominated multi-currency facility of \$80.0m (£64.0m).

Debt covenants are net debt to EBITDA of less than 3.0 times and EBITDA to interest greater than 4.0 times. As at 31 March 2023 the business had net cash.

Pensions

The Group has a defined benefit pension scheme in the UK. This has been closed to new entrants since 2001 and closed to future accrual from 2010.

On an IAS 19 basis, the surplus arising from our defined benefit pension scheme obligations on 31 March 2023 was £26.4m (2022: £51.7m). The value of scheme assets fell to £251.5m (2021: £351.7m) due to a fall in value of the scheme's gilt holdings and other liability matching assets. Scheme liabilities decreased to £225.1m (£300.0m), principally due to an increase in the discount rate and a decrease in the inflation-linked assumptions.

Pension recovery payments above charge to operating profit total £11.7m (2022: £7.6m). During the year, an advance payment of £4.0m was made to allow the Trustees to meet collateral calls to swap counterparties under the Liability Driven Investment scheme. These funds were not required and while the company has the right to recover this advance through making reduced payments in the future, it is not expected to do so.

The scheme's actuarial valuation review, rather than the accounting basis, determines our cash payments into the scheme. The Liability Driven Investment strategy is working as intended, with the actuarial deficit falling during the year, in line with expectations. The cash contributions into the scheme are expected to continue until 2025/26, at which point we expect, based on current assumptions, for the scheme to achieve self-sufficiency. The scheme rules provide that in the event of a surplus remaining after settling contractual obligations to members, the Group may determine how the surplus is utilised.

Going concern

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Performance Highlights, Chief Executive's Review and Operations Review sections of this Report. The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Finance Review.

Trading for the Group has been strong during the year. The Group has prepared and reviewed a number of scenarios for the Group based on key risks noted for the business and the potential impact on orders, trading and cash flow performance. In addition, the Group has overlaid the risk of long-term adverse movements in currency rates to our cash flow forecasts. The Board is satisfied, having considered the sensitivity analysis, as well as its funding facilities, that the Group has adequate resources to continue in operational existence for the foreseeable future.

Forward-looking statements

This document contains certain forward-looking statements. The forward-looking statements reflect the knowledge and information available to the company during the preparation and up to the publication of this document. By their very nature, these statements depend upon circumstances and relate to events that may occur in the future, thereby involving a degree of uncertainty. Therefore, nothing in this document should be construed as a profit forecast by the company.

Gavin Hill

Chief Financial Officer

14 July 2023

RISK MANAGEMENT

Audit, risk and internal control

Approach to risk management

An ongoing process for identifying, evaluating and managing the significant risks faced by the Group is embedded in all business units. Day-to-day management of this process has been delegated by the Board to the Executive Directors. Details of the process are set out in the Audit and Risk Committee Report on pages 138 and 139. The current risk management and internal control systems have been in place throughout the financial year and up to the date of approval of the Report and Financial Statements, and are subject to annual review by the Board. In respect of the year ended 31 March 2023, the Board considered that these processes remained effective.

Summaries of our risk management framework and process can be found below and on pages 95 to 96.

The Board has carried out a robust assessment of the principal risks facing the Group, including those which threaten its business model, future performance, solvency

and liquidity. Details of all major risks identified, and the mitigating actions adopted, are reported to and reviewed by the Board and the Audit and Risk Committee on at least a quarterly basis. The principal risks set out on pages 97 to 101 provide an overview of the major risks and uncertainties faced by the Group. All operating businesses follow a standard process for risk identification and reporting. The process is further described on page 96. On a regular basis, each business reviews and updates its risk register which is then reported to the Chief Executive. If a material risk changes or arises, this is reported to the Chief Executive, at which time there is a discussion on the adequacy of the mitigating actions taken. In addition, the Board and the Audit and Risk Committee consider risks to the Group's strategic objectives which arise at a Group level and develop appropriate actions to manage and mitigate these risks where possible.

Priorities during financial year ended 31 March 2023

During the year ended 31 March 2023 the principal priority was the integration of the processes for identifying, evaluating, and reporting on climate-related risks and opportunities across the Group, as set out in the Task Force on Climate-Related Financial Disclosures (TCFD) Statement on pages 60 to 71. These processes have been successfully integrated into the wider enterprise risk management processes and the detailed assessment of key risks using a standardised methodology, as performed by the business units across the Group.

In compliance with the Financial Conduct Authority's Listing Rule 14.3.27, the climate-related financial disclosures consistent with the TCFD Recommendations and Recommended Disclosures have been included within the TCFD Statement, which also encompasses further information regarding the Group's exposure to climate-related risks and opportunities.

Internal control

The internal control framework includes central direction, oversight and risk management of the key activities within the Group. This framework includes a financial planning process which comprises a five-year planning model and a detailed annual budget which is subject to Board approval. All Group businesses' results are reported monthly and include variance analysis to budget and the prior year. Management also prepares monthly reforecasts.

Control activities include policies and procedures for appropriate authorisation and approval of transactions, the application of financial reporting standards and reviews of significant judgements and financial performance. Financial, regulatory and operational controls, procedures and risk activities across the Group are reviewed by the Group's internal audit and assurance function or are subject to separate review by subject matter experts where required (e.g. health and safety and product compliance).

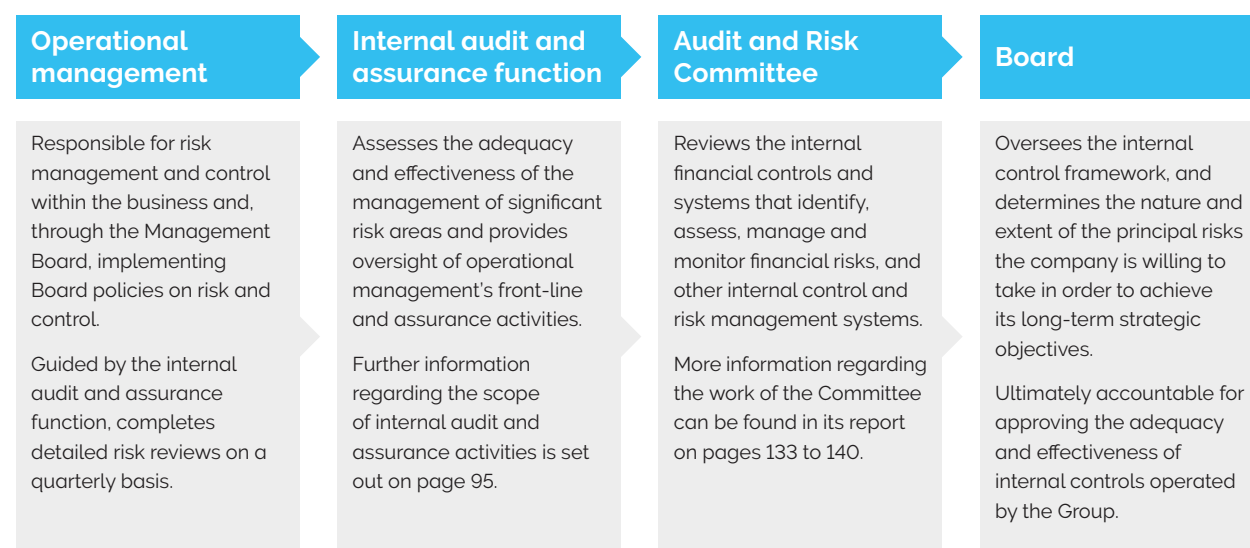
The internal control framework has been designed to manage, rather than eliminate, material risks to the achievement of strategic and business objectives and can provide only reasonable, and not absolute, assurance against material misstatement or loss. Due to inherent limitations, internal controls over financial reporting may not prevent or detect all misstatements. There has been no material change to the Group's internal control framework during the period covered by this Report and Financial Statements.

The key components designed to provide effective internal control within the Group include:

- a formal schedule of matters reserved for the Board for decision and specific terms of reference for each of its Committees; other than these matters, the Board delegates to the Chief Executive, who in turn reviews the delegation of authorities throughout the management structure;
- the Group's internal management beneath the Board is led by the Management Board. Its membership comprises the Executive Directors, senior managers with Group-wide functional responsibilities and the heads of the principal businesses of the Group's activities. Day-to-day responsibility for the management of the Group is delegated to the Management Board, with responsibility aligning to separate business units. There are clearly defined lines of management responsibilities at all levels up to and including the Group Board, and the Group's accounting and reporting functions reflect this organisation;
- whilst financial executives within Group businesses report to their own operational head, there is also a well-established and acknowledged functional reporting relationship through to the Chief Financial Officer;
- the Board reviews strategic issues and options formally once a year during the annual strategic planning process and during the year as appropriate. In addition, the Executive Directors maintain a five-year planning model of the Group and its individual businesses;
- annual budgets are prepared for each of the Group's businesses which include monthly figures for turnover, profit, capital expenditure, cash flow and borrowings. The budgets are reviewed through the Group management structure and result in a Group financial budget which is considered and approved by the Board;
- the businesses prepare monthly management accounts which compare the actual operating result with both the budget and prior year. They also prepare rolling reforecasts for orders, turnover, operating profit and cash. These are reviewed by the Board at each of its scheduled meetings;
- the Board approves all acquisition and divestment proposals and there are established procedures for the planning, approval and monitoring of capital expenditure;
- for all major investments, the performance of at least the first 12 months against the original proposal is reviewed by the Board;
- internal audits are carried out through a system of regular reviews of the financial and non-financial internal controls at individual businesses. This is further explained in the Audit and Risk Committee Report on pages 133 to 140;
- the Board receives regular updates on pensions, sustainability, business ethics, and health and safety, and the Audit and Risk Committee receives regular updates on treasury, tax, insurance and litigation;
- authorisation limits are set at appropriate levels throughout the Group; compliance with these limits is monitored by the Chief Financial Officer and the Group assurance function;
- there is a detailed and risk-based delegation of authority structure in place for sales contracts and managing commercial risks. Contracts with onerous terms and conditions (such as unlimited liability contracts) require approval by either the Chief Executive or Chief Financial Officer;
- the International Trade Committee monitors, considers action and makes recommendations around the management of key risks relating to international trade, including sanctions, export controls and customs; and

Risk governance framework

The diagram below summarises the key accountabilities and features of our risk governance framework.



RISK MANAGEMENT continued

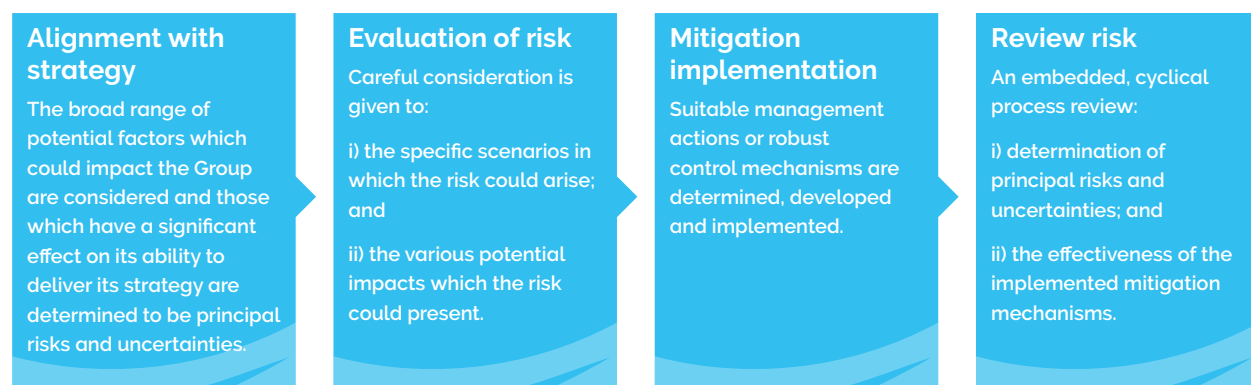
- as regards the UK pension scheme, the Group nominates half of the Trustee Directors of the Corporate Trustee to the pension scheme; involves as appropriate its own independent actuary to review

actuarial assumptions; agrees the investment policy with the Trustee; works with the Trustee on its investment sub-committee to deal with day-to-day investment matters; ensures there is an

independent actuarial valuation every three years; and agrees funding levels to provide adequate payments to the members as they fall due.

Risk management process

The diagram below summarises our methodical approach to risk management. The principal risks and uncertainties detailed on pages 97 to 101 of this report are monitored utilising this risk management process.



Emerging risks

The Board is required to complete a robust assessment of the company's emerging and principal risks and confirms that it performed such an evaluation during the financial year.

It is recognised that emerging risks can also be principal risks. A detailed description of the principal risks and the activities to mitigate these is set out on pages 97 to 101.

The identification and evaluation of emerging risks is derived from the Group's quarterly risk reporting framework. The output from the business units' detailed risk registers is reviewed by the Group Head of Risk and Assurance and the Chief Financial Officer every quarter. Any new risks reported by the business units are specifically identified and discussed as part of this process. Further, there is a formal review of emerging risks at the year end, with commentary provided to the Audit and Risk Committee as part of its review of the Group risk register and principal risks and uncertainties.

No emerging risks have been identified for reporting purposes during the latest review.

Principal risks and uncertainties

Principal risks are reported and discussed at every meeting of the Audit and Risk Committee. For Oxford Instruments, principal risks are generally those that could have a significant adverse impact on the Group's business model, financial performance, liquidity or reputation. The Audit and Risk Committee also considers emerging risks within the risk management framework. A formal review of emerging risks is conducted around the year end. For the year ended 31 March 2023, the review of principal risks included a revision to our assessment of supply chain risk. We consider that the likelihood of this risk arising has decreased, although its potential impact has increased. However, we consider that the magnitude of the residual risk has not changed, as set out on page 98.

As set out above, no emerging risks were identified.

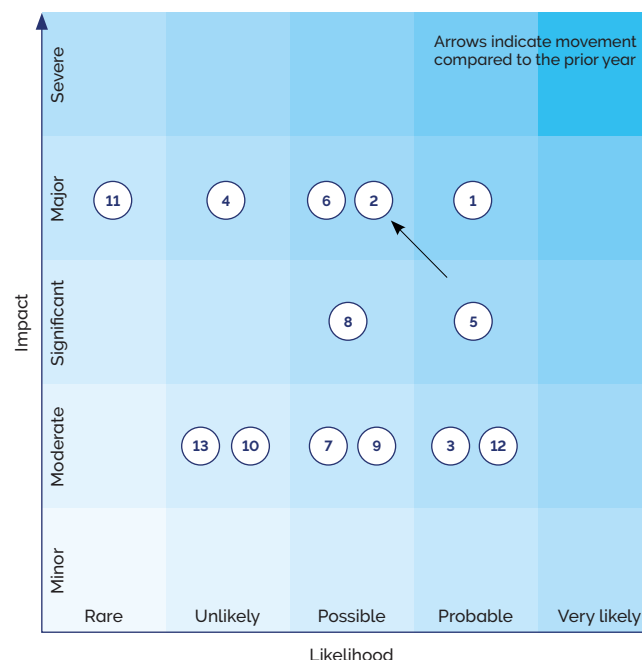
A minor change in the Group's approach to risk management during the year ended 31 March 2023 was the update of the scoring matrix for key risks at Group level and amendment to the bandings for the estimated impact of a risk arising, albeit risks continue to be categorised in a matrix based on the expected likelihood of the risk arising and their estimated impact. Business units continue to perform a detailed assessment of key risks using a standardised methodology. This now includes climate-related risks and opportunities, which were integrated into the wider enterprise risk management processes during the year ended 31 March 2023. The output is reported to the Group and is the basis for the compilation of the quarterly Group risk register by the risk management function, in collaboration with the Executive Directors. The resulting Group risk register is reported to the Audit and Risk Committee every quarter.

Principal risks and uncertainties matrix

To facilitate meaningful comparison of the relative importance of the principal risks and uncertainties at a Group level, these have been mapped onto a probability and impact matrix. This matrix includes arrows which indicate the change in the risk in comparison to the prior year's assessment. The methodology for mapping the risks uses the Group's assessment of the residual risk, being the probability of the risk occurring and the potential impact it may have, taking account of any mitigating actions and controls that have been implemented.

The output of this assessment is shown in the chart below. The most significant risks are located in the top right quadrant of the chart, while those assessed as being the least significant are found in the bottom left. The chart shows that our assessment of the likelihood of supply chain risk has decreased, although our assessment of its potential impact has increased.

The risk management process identified 13 principal risks which are set out below. The narrative provides a summary of the risk, explains why it is relevant to the Group and also sets out the potential consequences should the risk materialise, together with the mechanisms used for risk mitigation. The arrows indicate the direction of travel (up for an increased risk, down for a decreased risk). A static risk is depicted by the equals symbol. Risks are managed by the Board and are not assigned an individual risk owner.



- Key:**
- 1 Geopolitical
 - 2 Supply chain
 - 3 Routes to market
 - 4 New Product Introduction (NPI)
 - 5 Market risk: Recession/inflation
 - 6 Information technology
 - 7 Legal and regulatory compliance
 - 8 Adverse movements in long-term foreign currency rates
 - 9 Global pandemic/catastrophe causes major disruption
 - 10 People and capability
 - 11 Business interruption: operational
 - 12 Climate change
 - 13 Pensions

1 Geopolitical

Context: The Group operates in global markets and is required to comply with relevant regulations including, but not limited to, sanctions, tariffs and export controls. Government policy on the export of specific technologies and the approval of particular end users is subject to foreign policy objectives which can change over time.

Risk

Changes in the geopolitical landscape or an escalation in global trade tensions resulting in major obstacles to trade with customers in key markets. This can arise from sanctions, export licence refusals, trade tariffs, trade embargoes, or nations seeking to reduce reliance on imports in strategic technologies through the development of domestic competition and/or protectionist measures. We are seeing tighter UK Government export control policy, particularly in relation to exports to China, resulting in an increase in export licence refusals. Furthermore, the business is exposed to changes in both US and German export licence regulations.

Possible impact

- A contraction in export volumes to key markets and consequential loss of revenue and reputational damage
- Restrictions on the provision of after sales service, leading to lower service contract revenues
- Reduced access to key markets may impact research and development (R&D) investment decisions owing to adverse impacts on business cases
- Lower net pricing to key markets adversely affecting marginal revenue
- Increases to input costs and lower gross margins

Control mechanisms

- Engagement with UK Government and regulatory authorities
- Contract review and protection against breach of contract should export licences be withheld
- Long-term investment planning strategies

Mitigation

- Focus on lower-risk markets and end users
- Broad global customer base; contractual protection
- Market diversification

Change in the year:
=

- Key:**
- = Unchanged
 - ↑ Increased
 - ↓ Decreased

RISK MANAGEMENT continued

<p>2 Supply chain</p>	<p>3 Routes to market</p>	<p>4 New Product Introduction (NPI)</p>	<p>5 Market risk: Recession/inflation</p>	<p>6 Information technology</p>	<p>7 Legal and regulatory compliance</p>
<p>Context: The Group operates a global supply chain, sourcing from many suppliers across a wide range of categories. For certain technologies, there are limited alternative sources.</p>	<p>Context: In some instances, the Group's products are components of higher-level systems sold by original equipment manufacturers (OEMs), and thus the Group does not control its route to market.</p>	<p>Context: The Group provides high-technology equipment, systems and services to its customers.</p>	<p>Context: Demand from the Group's customer base may be reduced if there is a global contraction in investment in R&D and commercial investment. Further, global inflation may place upward pressure on key elements of the cost base such as labour and materials.</p>	<p>Context: Elements of production, financial and other systems rely on IT availability.</p>	<p>Context: The Group operates in a complex technological and regulatory environment, particularly in areas such as export controls and product compliance. Competitors may seek to protect their position through intellectual property (IP) rights and the Group may at times experience unintentional regulatory or IP compliance issues.</p>
<p>Risk</p> <ul style="list-style-type: none"> Operational disruption or price increases, due to supply chain shortages, particularly in electronic components Suppliers de-committing orders due to their inability to supply as a result of internal production issues. Change of supplier ownership resulting in loss of supply Regulatory changes or economic viability causing suppliers to discontinue production, impacting the long-term availability of key components 	<p>Risk</p> <ul style="list-style-type: none"> Vertical integration by OEMs 	<p>Risk</p> <ul style="list-style-type: none"> Failure of the advanced technologies applied by the Group to produce commercially viable products 	<p>Risk</p> <ul style="list-style-type: none"> Lower demand for the Group's products and services Rises in key cost drivers such as people costs, energy, components, and raw materials For sales of long lead-time items, requirement to make inflationary estimates when pricing, which may be inaccurate 	<p>Risk</p> <ul style="list-style-type: none"> Cyber-attack on the Group's IT infrastructure Ransomware/spread of viruses or malware 	<p>Risk</p> <ul style="list-style-type: none"> Infringement of a third party's intellectual property Regulatory breach
<p>Possible impact</p> <ul style="list-style-type: none"> Short-term delays or hiatus in our production arising from component shortages Poor customer service Reputational damage Lost revenue Downward pressure on margins Increased lead times and potential of being unable to fulfil orders Increased stock holding adversely impacting cash conversion 	<p>Possible impact</p> <ul style="list-style-type: none"> Loss of key customers/routes to market Reduction in sales volumes and/or pricing and lower profitability 	<p>Possible impact</p> <ul style="list-style-type: none"> Loss of market share or negative pricing pressure, resulting in lower turnover and reduced profitability Additional NPI expenditure Adverse impact on the Group's brand and reputation 	<p>Possible impact</p> <ul style="list-style-type: none"> Decrease in sales volumes Increased cost of production leading to a reduction in operating profit if not offset by sufficient price increases Potential for under-recovery of increases if inflation estimates are too low, or reduction in order volumes if competitors do not react similarly 	<p>Possible impact</p> <ul style="list-style-type: none"> System failure/data loss and sustained disruption to production operations Loss of business-critical data Financial and reputational damage 	<p>Possible impact</p> <ul style="list-style-type: none"> Potential loss of future revenue Future royalty payments Payment of damages Fines and non-financial sanctions such as restrictions on trade, exclusion from public procurement contracts Reputational damage
<p>Control mechanisms</p> <ul style="list-style-type: none"> Sales and operational planning process Group strategic sourcing programme to consolidate demand and manage key supplier risks Sourcing of alternative options and/or buffer stocks in relation to high-risk suppliers Long-term contracts with key suppliers 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Customer intimacy to match product performance to customer needs Positioning of the Oxford Instruments brand and marketing directly to end users 	<p>Control mechanisms</p> <ul style="list-style-type: none"> 'Voice of the Customer' customer listening approach and market intimacy to direct product development activities Formal NPI processes to prioritise investment and to manage R&D expenditure Product life cycle management 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Strategic focus on growth markets Price reviews Inflation protection in commercial response to long lead-time tenders and long-term agreements 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Suite of IT protection mechanisms including penetration testing, regular backups, virtual machines, and cyber reviews External IT security consultants Internal IT governance to maintain protection systems and our incident response Employee awareness training 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Formal 'Freedom to Operate' assessment to identify potential IP issues during product development Internal control framework including policies, procedures and training in risk areas such as bribery and corruption, sanctions and export controls Product compliance teams
<p>Mitigation</p> <ul style="list-style-type: none"> Strategic, selective and diversified supplier base Long-term demand planning Buffer stock in extended supply chain Relationship management with key suppliers Responsive and adaptive engineering change process 	<p>Mitigation</p> <ul style="list-style-type: none"> Strategic relationships with OEMs to promote the benefits of combined systems Product differentiation to promote advantages of Oxford Instruments' equipment and solutions Direct marketing to end users 	<p>Mitigation</p> <ul style="list-style-type: none"> Understanding customer needs/expectations and targeted new product development programme to maintain and strengthen product positioning Stage gate process in product development to challenge commercial business case and mitigate technical risks Operational practices around sales-production matching and inventory management to mitigate stock obsolescence risks 	<p>Mitigation</p> <ul style="list-style-type: none"> Ability to address inflationary pressures through price management reviews Reviews of key drivers of financial performance 	<p>Mitigation</p> <ul style="list-style-type: none"> Managed service with third-party security specialists providing incident monitoring Regular review, monitoring and testing of key security measures to assess adequacy of protection against known threats Upgrade of enterprise resource planning (ERP) and other internal systems End user education and phishing simulation exercises 	<p>Mitigation</p> <ul style="list-style-type: none"> Confirmation of 'Freedom to Operate' during new product development stage gate process Compliance monitoring programme over key risk areas
<p>Change in the year:</p> <p>⊖</p>	<p>Change in the year:</p> <p>⊖</p>	<p>Change in the year:</p> <p>⊖</p>	<p>Change in the year:</p> <p>⊖</p>	<p>Change in the year:</p> <p>⊖</p>	<p>Change in the year:</p> <p>⊖</p>

RISK MANAGEMENT continued

<p>8 Adverse movements in long-term foreign currency rates</p> <p>Context: A high proportion of the Group's revenue is in foreign currencies, notably US dollars, while the cost base is predominantly denominated in sterling.</p>	<p>9 Global pandemic/catastrophe causes major disruption</p> <p>Context: The Group operates in a global market. Supply and demand can be materially affected in the short term by major global events such as pandemics, conflict or natural disaster.</p>	<p>10 People and capability</p> <p>Context: Delivering and protecting core capability and knowledge is a strategic priority for the Group.</p>	<p>11 Business interruption: operational</p> <p>Context: Business units' production facilities are typically located at a single site.</p>	<p>12 Climate change</p> <p>Context: Climate change generates both risks and opportunities. Our response needs to address risks and optimise opportunities. More detail on our approach is set out in our Task Force on Climate-Related Disclosures Statement on pages 60 to 71.</p>	<p>13 Pensions</p> <p>Context: The funding requirement for the company's legacy defined benefit pension scheme varies, based on investment performance and other external factors.</p>
<p>Risk</p> <ul style="list-style-type: none"> Long-term strengthening of sterling against key currencies such as the US dollar, Japanese yen and the euro 	<p>Risk</p> <ul style="list-style-type: none"> Potential reduction in customer demand, disruption to supply chains and Group operations leading to cancelled orders/reduced order intake, delays in production, and/or installation at customer sites 	<p>Risk</p> <ul style="list-style-type: none"> Challenges in attracting and retaining high-quality talent in a tight labour market Shortage of key capabilities required to meet the Group's strategic priorities 	<p>Risk</p> <ul style="list-style-type: none"> Sustained disruption to production arising from a major incident at a site 	<p>Risk</p> <ul style="list-style-type: none"> The transition from fossil fuels to a low-carbon/net zero economy may require significant changes in materials used and production methods that may impact our own operations and those of our suppliers Chronic changes in weather and extreme weather events may disrupt supply chains, operations, and logistics 	<p>Risk</p> <ul style="list-style-type: none"> The actuarial pension deficit is sensitive to movements in actuarial assumptions and returns on investments. The factors affecting these assumptions are influenced by wider macro-economic factors that are largely outside the Group's control
<p>Possible impact</p> <ul style="list-style-type: none"> Reduced revenue and profitability 	<p>Possible impact</p> <ul style="list-style-type: none"> Lower delivery volumes and reduced order book leading to lower revenue and downward pressure on pricing Delays in both manufacturing and service activity leading to lost or delayed product and service revenue 	<p>Possible impact</p> <ul style="list-style-type: none"> Salary inflation and/or additional recruitment costs Adverse impact on NPI Operational disruption Lower sales and profitability 	<p>Possible impact</p> <ul style="list-style-type: none"> Inability to fulfil orders in the short term, resulting in a reduction in sales and profitability Additional, non-recurring overhead costs 	<p>Possible impact</p> <ul style="list-style-type: none"> Rises in production costs and product development costs to reduce CO₂ emissions linked to our products Delayed production and/or installation leading to delayed revenue Reputational damage or loss of investment arising from failure to anticipate or address climate risk More expensive freight and packaging costs 	<p>Possible impact</p> <ul style="list-style-type: none"> Variations to the current deficit recovery plan Increase in the annual levy paid to the Pension Protection Fund
<p>Control mechanisms</p> <ul style="list-style-type: none"> Treasury management of short-term hedging programme Strategic management of currency exposure 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Sales production matching and contract review process Horizon strategy to focus on attractive markets for long-term growth Operational reviews Strategic review of location of service personnel compared to installed base 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Strategic focus on the employee experience, including career development, communications and competitive remuneration, to differentiate Oxford Instruments 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Contingency plans are in place for all manufacturing sites Contractual protection to limit financial consequences of delayed delivery 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Sustainability Committee Climate-related risks and opportunities evaluation and reporting embedded in operating businesses Strategic sourcing Product compliance groups 	<p>Control mechanisms</p> <ul style="list-style-type: none"> Ongoing review of investment strategy, including active control of risk, by the trustee's investment sub-committee Liability hedging programme to mitigate exposure to movements in interest rates and inflation Reduced exposure to equity markets
<p>Mitigation</p> <ul style="list-style-type: none"> Review of supply chain currency base Active review of net exposure in key currencies 	<p>Mitigation</p> <ul style="list-style-type: none"> Sales and operational planning processes Contractual protection Safe ways of working and changes to shift patterns to maximise capacity Remote service activities Strategic procurement, working with supply chain to mitigate risk 	<p>Mitigation</p> <ul style="list-style-type: none"> Talent management and succession processes Leadership and technical development programmes Hybrid and remote working policies to facilitate location-agnostic appointments Visa sponsorship registration for employee mobility Comprehensive internal communications Regular updates to benefits packages to maintain competitiveness 	<p>Mitigation</p> <ul style="list-style-type: none"> Detailed responses in contingency plans can reduce downtime arising from incidents and facilitate the restoration or relocation of production Standard sales contracts include clauses for limitation of liability, liquidated damages and the exclusion of consequential losses Business interruption insurance 	<p>Mitigation</p> <ul style="list-style-type: none"> Product compliance teams have an established methodology to deal with changes to environmental regulations Investment in product development to capitalise on the opportunities for our key enabling technologies to help customers address climate-related challenges Investment in CO₂ reduction solutions 	<p>Mitigation</p> <ul style="list-style-type: none"> The Group closed its UK defined benefit pension scheme to future accrual in 2010 The Group has a funding plan in place to eliminate the actuarial deficit by 2025/26
<p>Change in the year: =</p>	<p>Change in the year: =</p>	<p>Change in the year: =</p>	<p>Change in the year: =</p>	<p>Change in the year: =</p>	<p>Change in the year: =</p>

VIABILITY STATEMENT

The Board has assessed the viability of the Group over a three-year period, taking into consideration its current position and the potential impact of certain of its principal risks and uncertainties. This assessment concerns the three-year period from 1 April 2023 to 31 March 2026 (the 'Viability Assessment Period').

Risk area	Potential impact of risk	Explanation
1. Geopolitical, supply chain, routes to market, technical, global pandemic/ catastrophe and operational risks	Loss of revenue due to lower volumes, leading to lost margin.	<p>The potential impact is estimated by applying the following sensitivities to revenue:</p> <ul style="list-style-type: none"> Year 1 – no growth for any business (i.e. revenue in line with FY22/23 actual) Year 2 – a 10% reduction in revenue for all businesses Year 3 – no growth for any business (i.e. revenue the same as year 2).
2. Supply chain risk, market risk, climate change	<p>Reduction in gross margin if business units are unable to mitigate cost increases through higher selling prices.</p> <p>Increased overheads.</p>	<ul style="list-style-type: none"> Simulates lower gross margins from failing to recover increased input costs via increases in the selling price and the impact of incremental overheads that could arise in key areas such as staff costs, logistics and facilities costs, including energy. Applied to all business units and, in respect of overheads, also to the Group function. 5% increase in direct costs in year 1 compared to the baseline (despite the sensitivity applied to revenue in year 1). This has the impact of reducing the average contribution margin by approximately 2 percentage points. Changes to direct costs in years 2 and 3 vary directly in line with revenue. Overheads increased by the higher of 5% per annum in year 1 of the Viability Assessment Period or the increase used in the baseline forecast if higher. No increase in overheads in years 2 and 3, despite the reduction in revenue. This reflects the Group's ability to manage any inflationary pressure in the overhead base should the revenue sensitivities materialise.
3. Legal & compliance, IT, New Product Introduction, people and pensions risks	Additional non-recurring overhead costs.	<ul style="list-style-type: none"> Additional non-recurring charges of £10m have been applied, reflecting contingency for the potential impact of a significant charge arising in year 1. It has been applied at Group level only.
4. Adverse movement in long-term foreign currency rates	Lower revenue and margin in sterling.	<ul style="list-style-type: none"> This assessment considered the potential impact of foreign exchange risk, specifically adverse movements in foreign exchange rates compared to the baseline rate against net currency exposure (i.e. net receivables that are not hedged), and was applied for all three years within the Viability Assessment Period. As Treasury is managed at Group level, this scenario was quantified at Group, rather than at each individual business unit, level. The baseline forecasts at business level were prepared using budget rates for key currencies (US dollar, euro and yen) that are unfavourable compared to the current exchange rates. As a consequence, the baseline includes a positive foreign exchange impact reflecting the anticipated benefits of transactions being executed at more favourable rates (reflected in the hedging programme). No change in year 1 based on current exchange rates and the short-term hedging programme. Addition of a currency headwind in years 2 and 3 amounting to a decrease in adjusted operating profit of £2.0m in year 2 and £14.0m in year 3.

Whilst the Board has no reason to believe that the Group will not remain viable for a longer period, it is comfortable that three years is an appropriate assessment period because the medium-term strategic financial plan ('SFP') provides appropriate visibility of key areas such as product development and capital expenditure requirements. Further, this approach is consistent with the approach taken since the introduction of this specific requirement in 2016, pursuant to the UK Corporate Governance Code.

Scenario testing

The viability assessment, by way of scenario testing, considered the potential impact of the principal risks and uncertainties and the likelihood of them arising, in order to best categorise them based on the nature of the impact. For further detail regarding the key risks and uncertainties which have been considered in this assessment, see page 102. A key element of the Horizon strategy is to target markets with attractive growth potential. The Group takes action to pivot away from markets with greater risk or that are in decline, in favour of those that provide better opportunities for growth. Notwithstanding this approach, the Group's performance may be impacted if certain key risks were to materialise and have a negative impact on annual sales. The table on page 102 outlines the risk areas, their potential impact and explains the nature of the scenario testing performed.

Note that not all principal risks and uncertainties have been utilised for scenario testing purposes in this context. The potential impact of cyber risk (for example, disruption to business-as-usual operations arising from a cyber attack or malware) has not been estimated through the inclusion of a specific scenario, as the impact is unpredictable (as it would depend on the nature and duration of the issue) and because the downside impact assessed from the impact of the other risks is considered to be sufficient to account for this risk. Further, some of the potential short-term impacts that may arise from climate change such as component obsolescence and price inflation from decarbonisation are reflected in the inflationary cost sensitivities that have been applied to direct costs and overheads, but potential longer-term impacts fall outside the Viability Assessment Period.

Methodology

The Group starts the Viability Assessment Period with a positive net cash position. The criteria used to assess viability were the same as the prior year. The Board believes that either maintaining a positive net cash position during the Viability Assessment Period or, alternatively, operating within agreed debt arrangements (particularly relevant if retained cash is used to fund acquisitions), would demonstrate the Group's liquidity to meet its liabilities as they fall due. Currently, the Group has committed credit facilities of approximately £108m. There are covenants associated with the facilities which principally require the Group to operate within a ratio of three times EBITDA to net debt. These covenants therefore could limit the headroom available from facilities and are factored into the viability assessment calculations where relevant.

The starting point to undertake the viability assessment is the three-year Group forecast ('Forecast') produced as part of the annual budgeting process. The Forecast has several scenarios which include a negative market case, a mid case and an upside case. The mid case Forecast forms the 'Baseline' for the viability assessment calculations. The sensitivities set out above were applied to the Baseline to provide a sensitised operating profit figure for the Group.

The Forecast includes cash flow forecasts for each year of the Viability Assessment Period at Group level only. These start with the operating profit calculations (after sensitivities), and then apply the same assumptions as the baseline model to calculate movements in working capital, investing activities, tax, dividends paid, etc. to forecast the net cash flow in each year. Thus the viability assessment uses the same model as the Forecasts to estimate annual movements in net cash and includes no adjustment for any mitigating actions that the Group might take in the event of adverse financial performance, such as reduced capital expenditure, changes to dividend policy, reduction in bonuses, etc. This reflects a prudent approach to the viability assessment calculations.

The cumulative impact of the scenarios tested is to reduce revenue by £215m (15% of the Baseline total) and operating profit by roughly 57% compared to the Baseline in the three-year period covered by the assessment. However, the only elements of the cash flow forecasts that have been adjusted in the viability assessment relate to the movements in working capital and the tax payment. All other cash flows including, but not limited to, capital expenditure, R&D expenditure and dividends, have not been adjusted in the viability assessment.

VIABILITY STATEMENT continued

Conclusion

In aggregate, over the three years of the Viability Assessment Period and subsequent to scenario testing, the calculations demonstrate that the Group would remain profitable and would continue to generate a positive operating cash flow. The outcomes show positive EBITDA and positive adjusted operating profit in all three years. However, the net cash movement in the Viability Assessment Period would be negative in years one and two but positive in year three, with the cumulative impact being a net inflow of approximately £10m. Consequently, the Group would still retain a healthy net cash balance at the end of the Viability Assessment Period and at each balance sheet date during the period.

The forecast level of net cash, combined with banking facilities of approximately £108m, demonstrate that during the Viability Assessment Period, the Group's forecasts include substantial headroom. Consequently, the Board has a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the next three years.

The outcome of this assessment supports not only the Viability Statement, but also the going concern statement.

Going concern statement

The Group's business activities and factors that are considered likely to affect its performance and position in the future are set out in the Strategic Report on pages 18 to 104. The Finance Review on pages 82 to 93 discloses information relevant to the Group's financial position, its cash flows, borrowing facilities and liquidity. The Board has considered the Group's current financial position and future prospects and, as set out in the Viability Statement above, has performed an assessment of longer-term viability up to 31 March 2026. On this basis, the Directors conclude that there is a reasonable expectation that the Group will continue in operational existence for the foreseeable future and that there are no material uncertainties which may cast significant doubt over its ability to continue as a going concern. As a result, the Board considers it appropriate to continue to adopt the going concern basis of accounting.

Approval

The Strategic Report was approved by the Board on 14 July 2023.

Ian Barkshire
Chief Executive

14 July 2023