XAAR
Group

Xaar plc

Annual Report and Financial Statements
2024

We are Xaar
Annual Report and Financial Statements 2024

We are a world leader in the development of digital inkjet technology. We design and manufacture printheads which we sell globally to Original Equipment Manufacturers (OEMs) and User Developer Integrators (UDIs).

Our technology drives the conversion of analogue printing and manufacturing methods to digital inkjet, which is more efficient, more economical, more productive and more sustainable.

In addition to printheads (Xaar), we develop print systems for product decoration (EPS) which use our inkjet technology, as well as fluid management systems (Megnajet) which are robust, reliable, and easy to integrate.

We also produce high performance digital imaging technology for inkjet printing applications.

We put innovation and collaboration at the core of our global partnerships, helping our customers to unleash the true power of our technologies and open up a world of opportunities for their business, today and into the future.

You can find all of the relevant information on the links below:

Sustainability Report 2024

→ **Visit our Sustainability Report: www.xaargroup.com/esg**

Annual Results 2024

→ **Visit our website: www.xaargroup.com/investor-centre**

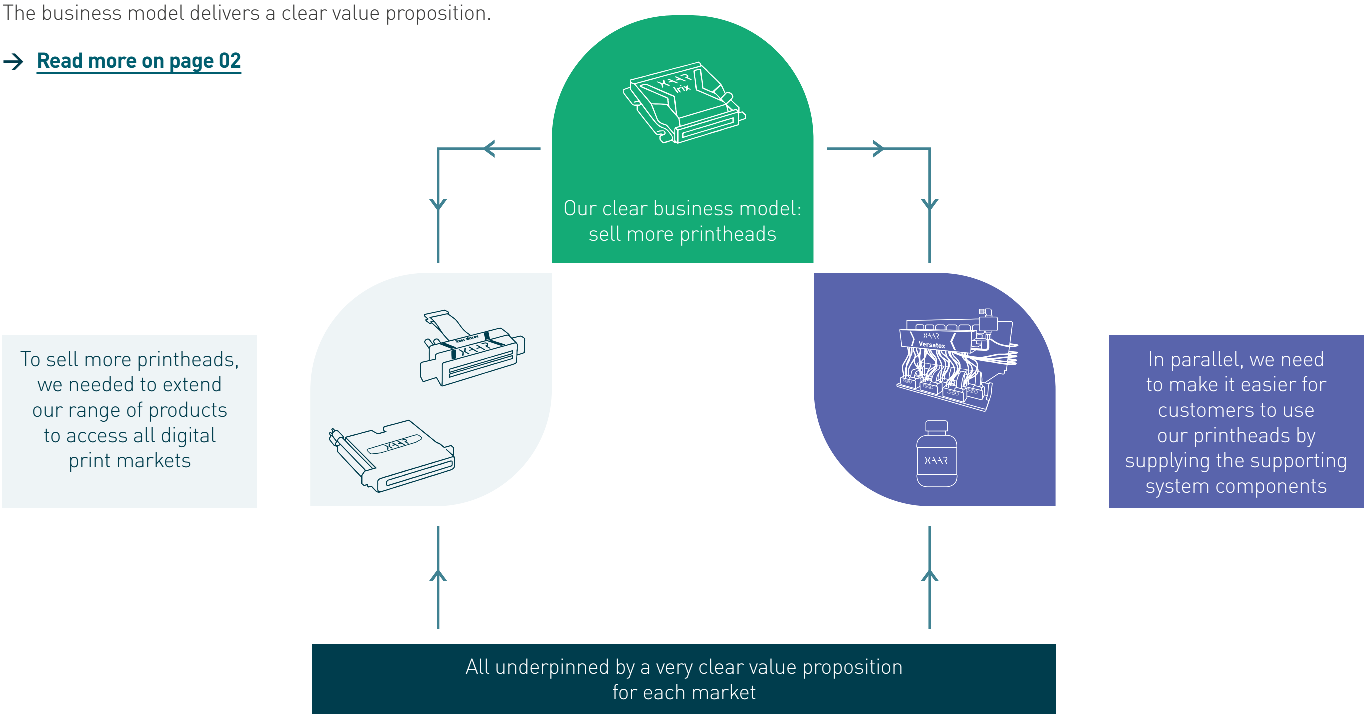
Our website

→ **Visit our website: www.xaargroup.com**

Our strategy

Our strategy is to sell more printheads.
The business model delivers a clear value proposition.

→ **Read more on page 02**



Our 2024 performance

REVENUE

£61.4m

2024 £61.4m
2023 £70.2m

GROSS MARGIN

36%

2024 36%
2023 38%

R&D SPEND

£5.3m

2024 £5.3m
2023 £5.6m

NET CASH INFLOW/(OUTFLOW)

£1.6m

2024 £1.6m
2023 £(1.4)m

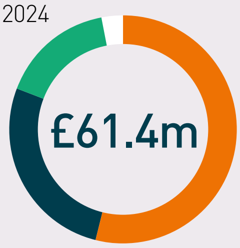
CASH & TREASURY DEPOSITS

£8.7m

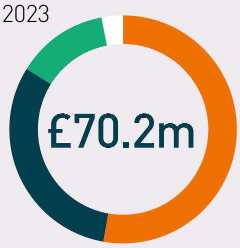
2024 £8.7m
2023 £7.1m

Our business performance

2024



2023

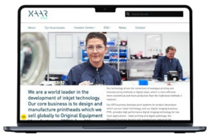


	2024		2023
Printheads	55%	Printheads	53%
Product Print Systems	26%	Product Print Systems	31%
Digital Imaging	15%	Digital Imaging	13%
Ink Supply Systems	4%	Ink Supply Systems	3%

What's in this report

Learn more

→ Visit our website



Business model and strategy

Xaar's business is focused on inkjet technology, which together with our partners and customers, we have been transforming for over 31 years.

Xaar plc is structured into business units: Xaar Printhead, the largest business unit (BU), focuses on printhead technology; our other three business units concentrate on fluid management systems, product print systems and digital imaging.

Our printhead business sells our inkjet technology in component form (the printhead, branded Xaar) to OEMs who produce and sell the complete digital printing solution. We also work with User Developer Integrators (UDIs) who are building their own digital system.

We work collaboratively with leading fluid manufacturers to fully optimise the fluids beyond a lab setting to ensure optimum print performance in real world applications. We also sell Xaar branded fluids to UDIs (manufactured by our ink partners) which helps to build long-term relationships with our customers. In addition, we actively partner with hardware and software integrators as well as substrate suppliers to deliver a robust and attractive total solution to our customers.

Megnajet is a market leader in the design and manufacture of industrial fluid management systems for digital inkjet. The Company provides robust, reliable, easy to integrate products which are sold to a range of OEMs in USA, Europe and Asia.

Our strategy

Our strategy is to sell more printheads. For this to occur we need to extend our range of products to access all digital print markets, as well as make it easier for customers to use our printheads by supplying the supporting systems components. To drive this we need to ensure that our customers understand what Xaar has to offer and why it is the right choice for them.

Our business model

Xaar designs

We have R&D facilities in Cambridge and Stockholm (printhead and print systems businesses) and Vermont (EPS).

We invest a substantial proportion of our product revenue in R&D to remain a world leader in inkjet technology.

We continually add to our Intellectual Property (IP) portfolio, and currently, across the Xaar Group, we have around 250 patents and patent applications.

Xaar manufactures

Xaar manufactures its printheads in Huntingdon, UK. Xaar's manufacturing is capital intensive.

The Group has invested over £70 million in assets and production facilities in Cambridgeshire, UK since the plant opened in 2007.

EPS, our product printing business, manufactures customised and bespoke printing solutions in Vermont, USA.

Megnajet manufactures supply systems in Northamptonshire, UK.

Xaar sells

Xaar's printhead business sells direct to OEMs and UDIs around the world through its global sales team. Xaar's highly skilled application engineers offer technical support to assist OEMs and UDIs in the successful design, build, commissioning, and ongoing maintenance of printing systems.

We export over 95% of our printheads to customers around the world, within the Europe, Asia and North America regions.

EPS sells product printing equipment, services and consumables. The majority of sales are to US customers.

Megnajet sells its products directly to customers and via Xaar.

Xaar markets

Xaar offers a wide range of industrial inkjet printheads and print systems which are designed and produced to meet the customer-driven requirements for a range of manufacturing applications.

Primary markets include:

+ 3D Printing
+ Advanced Manufacturing
+ Ceramic Tile Decoration
+ Coding & Marking
+ Decorative Laminates
+ Direct-to-Shape
+ Functional Fluid Deposition
+ Glass Printing
+ Graphics
+ Primary Labels
+ Packaging
+ Product Printing
+ Textiles.

We create value for all our stakeholders

Customers

OEMs, User Developer Integrators and end users are able to innovate in their manufacturing methods and their products as well as benefit from a shorter distribution chain; they can take products to market more quickly, implement more precise and efficient processes, easily produce short batches, improve productivity, reduce waste and deliver more creativity.

Shareholders

A key goal at Xaar is to maximise the long-term growth in value delivered to shareholders via sustained, consistent growth in earnings per share. This is delivered through continued investment in R&D and producing a pipeline of new products which deliver a sustained return on capital employed.

Our employees

Our success depends on the skills, capability and engagement of our people. We want to create an environment where everyone can come to work and share our values and passion for developing and manufacturing world-leading technology.

We are building a culture where our employees are passionate about what they do, and where integrity, innovation, creativity and collaboration are a way of life. To foster this, we have a cross-functional project team which is committed to embedding our values throughout the whole Group, looking at ways to highlight our employee values awards (EPIICC awards) and driving the Company-wide acknowledgement of the nominated employees.

To build up team collaboration and provide an opportunity for employees to socialise away from their desks, we regularly provide a coffee van or lunch. In addition, we have continued with forums where employees have the opportunity to meet and chat with all our Non-Executive Directors along with the Exec Xchange where our employees get to meet members of the senior management team in smaller groups to ask questions and exchange ideas.

We like to build long-term relationships with all our employees by helping them grow and develop and by making Xaar businesses interesting places to work as well as great companies to be involved with.

Environment

Digital print methods are inherently more environmentally friendly than the analogue techniques we seek to replace. Our research shows that, compared to analogue alternatives, digital has a huge impact in reducing energy consumption but also in reducing pollution and waste materials.

Xaar is committed to reducing its impact on the environment wherever possible.

Our actuator technology consumes less energy than competitor alternatives and our industrial printheads can remain in use for many years. In addition, we use a continuous improvement methodology and we have adopted a manufacturing ethos of "reduce, reuse and recycle". Environmental best practice and our investment in sustainable manufacturing and operational efficiencies remain key areas of business focus.

Our ESG Roadmap, launched in our 2021 Annual Report, continues to drive and shape all business decisions via the ESG Committee. The Roadmap has five key pillars – Environmental, People, Innovation, Community and Governance; its purpose is to drive our ESG goals beyond the energy reduction scope to a Group-wide activity. We continue our focus on moving to solar energy. Whilst we have more work to do, over 99% of our UK consumption is already green. We completed the installation of our planned EV infrastructure. The solar installation project for the Huntingdon factory is continuing.

Why invest

Market opportunity

We focus on markets where we have a competitive advantage, where we can offer a number of benefits over incumbent technologies.

+ A unique recirculation technology past the back of the nozzle as well as inside the nozzles which offers substantially better printhead reliability and nozzle open time.
+ Patented technology which enables printing fluids which have a high pigment content and high viscosity. This gives us a wider window of opportunity because we can handle a wider range of fluids to deliver richer, more vibrant colours, or add functionality like scratch resistant or anti-slip surfaces, or value add embellishments and print effects.
+ An open internal printhead design which produces industrial levels of printhead reliability and consequently higher production uptime.

Sectors where we focus include Advanced Manufacturing, Ceramics and Glass, Coding & Marking and Direct-to-Shape, 3D and, Packaging and Textiles, as well as Graphics and Labels.

Proven technology and product roadmap with a strong value proposition

We have a product roadmap based on our ImagineX technology platform that will develop our range to offer advantages over the competition and open new markets. Our unique technologies and products are the leading enabler for innovation and creativity, and for driving production efficiencies for many industries.

Experienced and focused management team

As the only leading independent printhead manufacturer we are able to have a flexible, collaborative approach. Our experienced management team is committed to remaining customer-centric with a focus on Xaar's profitable growth strategy of offering our customers a vertically integrated solution.

A clear strategic vision

Our customer-centric business model places the OEM and UDI at the heart of everything we do. We continue to execute on our plan to become more vertically integrated to drive printhead sales. Our ability to supply electronics, software, fluid management systems and print engines alongside application support, combined with a disruptive technology, sets us apart from our competition.

Roadmap to deliver the opportunities

Our ImagineX platform (launched September 2020) is driving our progress, enabling the business to increase its addressable markets whilst establishing market leading products across all our sectors. ImagineX has already delivered significant enhancements to the current portfolio; these include substantially improved speed and throughput as well as high throw distance and viscosities of over 100cP at jetting temperature. We have now launched three new printheads on this platform: (Xaar Aquinox, Xaar Nitrox and Xaar Irix). Future product launches focus on increased robustness to improve the life of the printhead and even higher resolutions.

Healthy balance sheet position

We have the resources necessary to implement our strategy. This provides the platform for security and a great foundation for future growth.

Chairman's statement

Over the course of 2024, Xaar has continued to make strategic progress, positioning the Group for sustainable and significant future growth.

While traditional print markets and ceramics remain important, it is in applications where the jetting of high viscosity and high particle-loaded material is revolutionising manufacturing processes that the most significant opportunities exist for Xaar. The recognition of our differentiated technology is gaining momentum, opening up a wide variety of new markets, each with substantial revenue potential.

With continued growth in new market revenue, the Group is becoming increasingly resilient. After completing acquisitions earlier in the decade to help support the adoption of our printheads, we remain focused on the growth of our core Printhead business. We disposed of Xaar 3D to Stratasys in November 2021 and exited the non-core Life Science business, which was part of FFEI, in June 2023. In addition, we transferred FFEI printbar and print engine manufacturing to Huntingdon during the first half of 2024, generating cost savings and enabling greater collaboration between teams. Megnajet and EPS continue to be managed as separate businesses within the Group.

Substantial market opportunities

As a consequence of our sustained R&D investment, our printhead development platform "Imagine X" continued to provide enhancements to the current portfolio, helping to further strengthen our technological leadership. While we still believe there is significant opportunity across a wide breadth of market sectors, we recognise the importance of focusing on a few key markets, which we believe will deliver substantial and enduring revenue streams. Key market opportunities include EV battery coating, automotive coating and desktop 3D printing markets. Additional exciting opportunities remain in the longer term, as well as current prospects in the more developed wax and textile markets.

Enhanced go-to-market approach

Our recent strategy has focused on developing market-leading technologies whilst enabling OEMs to efficiently integrate our technology into their machines. Our technological development has undoubtedly proven successful, but this did not translate into the anticipated revenue as headwinds, including technology integration issues, delayed several significant OEM product launches and the consequent revenue benefit.

It is for this reason that we have developed a complete turnkey solution approach, designed to allow OEMs to commercialise their Xaar-enabled products more quickly, mitigating the key integration headwind that we have faced in recent years. This approach was first utilised in M&R's newly launched product. M&R are a major player in the textiles sector. Our complete turnkey solution was integral in enabling the turnaround from concept to first customer sales in just six months, whereas historically it would have taken three years on average. Such solutions can then be sold to the wider market, leveraging the initial investment.

> **The recognition of our differentiated technology is gaining momentum, opening up a wide variety of new markets.**
>
> **Andrew Herbert**
> Chairman

Sustainability

The Board has reviewed and fine-tuned its approach to business sustainability as we recognise how integral it is to our overall success. We have re-baselined our ESG goals and created a new Roadmap. Its purpose is to drive our ESG goals beyond our own operations; Xaar's technology enables our customers to reduce their emissions as well as reducing Xaar's own. Our Roadmap provides an essential backbone for much of Xaar's future investment and activity. Xaar is committed to reducing its impact on the environment wherever possible and helping customers do the same.

Board changes

Whilst ensuring the Group is focused on the right strategy, I have been working to ensure the Board possesses the blend of skills and experience necessary to successfully execute our plans.

This was completed during the year as, following Alison Littley stepping down as a Non-Executive Director, Richard Amos became the Company's Senior Independent Director, and we welcome Dr Inken Braunschmidt as an Independent Non-Executive Director. Inken is Chair of the Remuneration Committee and is also a member of the Audit and Nomination Committees.

She brings much experience of innovation in technology businesses and adds a further dimension to Board expertise and senior leadership, completing the Non-Executive team with a strong blend of skills and experience to support the Group's development and future growth.

In November 2024, Ian Tichias resigned as Chief Financial Officer after nearly four years at Xaar. I would like to thank Ian for his contribution and commitment to the Group. He played a substantial role in reinvigorating the strategy and left Xaar with a healthy balance sheet, ensuring that the Group is well-positioned to capitalise upon the significant market opportunities that lie ahead.

In January 2025, Paul James was appointed CFO and Executive Director, after initially joining on an interim basis. Paul brings significant expertise and experience to the Group, from his time as Group CFO of Biffa from September 2023 until October 2024 and Group CFO of Genuit Group plc from March 2018 to September 2023. He also previously held senior roles with Dixons Carphone plc, Inchcape plc, British American Tobacco plc and Ernst and Young.

During 2025, I will reach nine years on the Board, and so I will be stepping down from the Board as a Non-Executive Director and Chair once my successor has been appointed.

Finally, I would like to pay tribute to the whole Xaar team for their tireless commitment and support, without which, the Group would not be looking forward to such an array of opportunities after several difficult years facing challenging end markets. Together we have delivered a material improvement in the quality and prospects of the Group through diversifying the product portfolio and expanding the end-markets we have access to. The position that we now find ourselves in, at the start of an exciting new chapter of significant growth, is testament to them. As I hand over, it will be exciting to see the Company grow and achieve its market-leading potential.

Andrew Herbert
Chairman

24 March 2025

Strategic update

Chief Executive Officer's Statement

At Xaar, our focus is on the manufacturing and development of reliable and technically advanced printheads that enable customers, in an increasingly wide array of end-use markets, to access high quality finish prints. Our precision inkjet technology facilitates the use of high viscosity inks, which are thicker and permeate less into surfaces, meaning improved print consistency and uniformity. These unique characteristics also typically have lower financial, environmental, water and energy costs, creating less fluid waste than other fluid application methods.

Looking to our target markets, the sale of printheads has annuity type characteristics, with demanding applications requiring the replacement of the printhead typically every two to three years. Furthermore, as all of our competition focuses on jetting low viscosity inks with our nearest competitor capable of only jetting inks with less than a third of the viscosity our printheads can jet – we are confident that once customers switch to our printheads, they will not switch back.

With printheads and comprehensive customer support as our main focus, we can now sell a complete turnkey solution to OEMs including inks, ink supply systems and print engines. These additional products enable the more rapid integration of our differentiated technology into OEM products and reduces the risk of OEMs running into integration difficulties.

Historically, we were heavily reliant on ceramics, but we have now successfully diversified our product portfolio, significantly de-risking Xaar's over-reliance on a single market in the medium-term and, therefore, improving the resilience of the Group to factors outside of our direct control. An increasingly diverse range of markets also provides a variety of growth drivers allowing more discretion as to the opportunities we wish to pursue, in terms of both scale, maturity and returns on capital.

Products launched since 2019 now generate revenue of £18.9 million and have delivered a compound annual growth rate of 24%. This progress has been masked by the cyclical deterioration in the ceramics market, which, due to the accelerated decline seen in 2024, is approaching the anticipated trough level sooner than previously envisaged. As a consequence, sales into the ceramics market contributed only 17% of total Printhead revenue in 2024 compared to 32% in 2023. Following recent developments, it has become clear that the EV battery coating, automotive coating and desktop 3D printing markets will likely be the main revenue opportunities for Xaar over the medium term.

Our focus remains on managing what is within our control; prioritising key revenue drivers, maintaining disciplined cash management and continually assessing opportunities to further strengthen and utilise the balance sheet. Our strategy is creating significant long-term opportunities, both within existing and new markets, especially as end-use customers begin to roll-out Xaar-enabled machines across their manufacturing lines.

Financial highlights

During 2024, we delivered a solid financial performance against a tough market backdrop with revenue declining 13% to £61.4 million (2023: £70.2 million). Despite clear strategic progress, results remain impacted by OEM product delays due to technology integration issues, a faster than anticipated drop-off in ceramics revenue and trading challenges at EPS. New Printhead business, defined as revenue from products launched since 2019, delivered year-on-year revenue growth of 23% to £18.9 million (2023: £15.4 million), underlining the significant progress we continue to make despite global macroeconomic conditions.

Revenue for EPS in 2024 has returned to a level more comparable with 2021, as over the prior two years revenue has benefited from a multi-year, multi-unit order from a single customer. We were unable to replace this contract with new business during the year due to market uncertainty delaying the rate of new customers switching from analogue to digital.

We saw positive performances within FFEI and Megnajet during the year. Within FFEI, last-time orders for the life-sciences business were stronger than anticipated, whilst Megnajet revenue, increased 7%, mainly due to significant orders from one customer who went through a period of de-stocking in 2023.

We continue to make operational efficiency savings, largely minimising the impact on gross margins caused by lower volumes and reduced fixed cost recovery as well as rising energy costs.

Finally, the Group continues to retain a strong balance sheet, with a net cash position at year end of £8.7 million, up 23% from £7.1 million in 2023 due to improvements in working capital movements as inventory levels were reduced during the year.

Strategic update

Over the last five years our investment in R&D through our printhead development platform "Imagine X", has successfully transitioned the Group from predominantly being a printhead supplier to the ceramics market, to now providing market-leading technology to OEMs across several markets. This will grow Company revenue beyond historic levels in the medium term at a far lower risk level.

With a focus on new product launches, we have developed a more resilient product portfolio with applications and avenues for growth in a diverse range of end-use markets. This provides a stable foundation for going forward and with the decline in the ceramics market largely behind us, allows us to concentrate on the accelerated uptake of our technology in markets that have substantial long-term and repeat revenue potential. The portfolio going forward has much more diversity in end markets and customers than it has ever had. The unique capability of our technology differentiates us from our competitors, allowing first-mover advantage in areas such as EV battery coating, automotive coating and desktop 3D printing.

Printhead

EV Battery Coating opportunity

The problem we solve: With the requirement for ever bigger and more powerful batteries, there is a corresponding increase in the amount of heat generated by these batteries. The current dominant technology used to wrap batteries is based on the use of plastic film which is increasingly no longer fit for purpose as it is not always able to withstand the higher temperatures, causing safety concerns. The existing alternative, which mitigates the safety issue, utilises spray painting. However, this requires a paint recovery system as some 40% of paint is lost in the process, generating costs that are unappealing to battery manufacturers.

The Xaar solution: Through the utilisation of Xaar inkjet technology, as opposed to plastic film, inkjet coated EV batteries can withstand far greater levels of heat, addressing safety concerns. With 99% yield efficiency, our technology generates minimal waste, making it significantly more cost-effective than spray painting.

The maturity of the opportunity: In July 2024, we launched two new printheads, the Xaar eX and Nitrox eX, specifically designed for coating the new generation of batteries used in EVs and energy storage systems. Through the eX printhead, Xaar became the first inkjet company to enter the battery sector with a printhead specifically for this application with substantial yield, cost and environmental benefits. Only our printheads can print a coating solution that meets the necessary safety tests. We worked with Shifang, a leader in EV battery production automation, and Omijia Intelligent Technology to develop their own coating lines.

During 2024, these companies became the first to launch inkjet EV battery coating machines[1] and both have received initial orders so their customers can test out the capabilities of our technology. These customers have signalled their intent to order additional machines in the near term, with an expectation of scaling their orders up markedly as confidence in inkjet coating technology grows.

1 https://www.xaar.com/news/xaar-s-innovative-inkjet-technology-enables-new-generation-of-ev-battery-coatings/

Strategic update
continued

The market potential: The market uptake of our technology could be substantial and we are currently the only provider. To scale the market opportunity, there are an estimated 1,300 EV battery production lines globally. 100% conversion of this market could generate £260 million of initial revenue with an estimate printhead replacement cycle of two years.

Automotive Coating opportunity

The problem we solve: Within the automotive coating market, there are two distinct problems. Firstly, if manufacturers wish to utilise multiple colours, such as painting roofs black, after the first colour is applied, the car is taken off the production line, masked and sprayed in the second colour. Spraying the car twice is not only inefficient, but with roughly 40% of paint lost when spray painting, it is costly in terms of both materials and energy. The result of this is that paint shops are currently the major bottleneck in car manufacturing plants; end customers and the OEMs, are seeking out a solution.

Secondly, if the individual customer wishes to customise their cars, adhesive decals are typically used. Decals applied this way are susceptible to jet wash damage, which has historically limited their wider appeal. Existing inkjet solutions for car decoration also face several challenges, including 'sagging' on sloped or vertical surfaces.

The drawbacks set out above have limited the uptake of incremental coatings to vehicles.

The Xaar solution: In terms of the two-tone vehicle market, Xaar inkjet technology is significantly more efficient than spray painting as it eliminates the need for masking and reduces energy and paint requirements. Our partner Axalta, a global leader in the sector, recently launched the Axalta NextJet™. This next generation, sustainable digital painting machine for the automotive industry, utilises our recirculating TF Technology, keeping the fluid in constant motion, and by doing so, improving paint shop reliability.

This award-winning digital paint coating technology eliminates masking and reduces labour, increasing productivity and efficiency rates. Axalta has already reported that this can contribute to a 30% reduction in CO_2 emissions and significant cost savings for vehicle OEMs who use two-tone.

Xaar technology also provides a high-quality solution to the drawbacks of adhesive decals. With the ability to precisely jet lower volumes, our printheads are leading the way in replacing poorly performing inkjets or adhesive-based decals with no 'sagging' and no risk of damage by jet washing.

The maturity of the opportunity: Axalta has recently agreed a partnership with Dürr[2], whose machines currently paint 50% of cars globally, to provide a digital paint solution, combining Axalta's NextJet™ technology with Dürr's robotics integration. Dürr are currently demonstrating their machines to potential customers and we anticipate a select few customers to be chosen as market partners during 2025.

The market potential: Through our partnership with Axalta, this market presents a significant opportunity for Xaar, and we anticipate that our technology will expand demand for customised detailing of vehicles over and above that from using decals and more traditional two-tone painting.

Xaar will receive revenue based on the number of cars painted. Currently c.1% of the 90 million cars produced globally have decals or two-tone paint.

As the current sole provider of this technology, we have the potential to take 100% of the market. For every 1% of the global car market or 900,000 cars annually that are painted using our technology, we would generate significant revenue and profit for Xaar before factoring in any market growth.

Desktop 3D Printing opportunity

The problem we solve: Within the desktop 3D printing market there is currently an absence of a low-cost, high-quality product. The retail cost of the nearest competitor machine, of equivalent quality, is roughly £40,000, meaning usage is restricted to real enthusiasts who are willing to pay for a premium product. Currently those unwilling to pay so much for a printer resort to single nozzle, monochrome, 3D printers. The price point of these machines varies between a few hundred pounds to over £5,000. As a result, large-scale customer growth in the market is severely limited.

The Xaar solution: Our technology provides the ability to jet high viscosity fluid at relatively low cost. This has enabled the world's first full colour high resolution desktop 3D printer aimed at the consumer market. By utilising Xaar technology, cost as a barrier to high-quality printing, has been substantially reduced for customers.

The maturity of the opportunity: Flashforge, a major global supplier of desktop 3D systems, launched their full colour inkjet machines[3] with Xaar printheads at the Formnext tradeshow in November 2024, priced at c.£2,400. In the short-term, Flashforge are launching a product promotion campaign alongside opening the pre-order book and they anticipate sending out the first orders in the second half the year. We are already engaged in development projects with other major global suppliers in the 3D wax market and anticipate further OEM product launches later in 2025.

The market potential: Over one million desktop printers are currently sold annually. Conversion of just 1% of that market to Xaar technology will generate multi-million-pound printhead revenue. As the machines have been designed for printheads to be regularly replaced, we anticipate recurring future revenue streams from each unit sold.

As the cost of purchasing a high-quality desktop 3D printer falls over the medium term, we would expect demand to grow, increasing the revenue potential for Xaar considerably.

Summary of the key future revenue drivers

Overall, these three markets each represent revenue opportunities of a magnitude greater than the ceramics market, illustrating the process of de-risking our business model over a relatively short period of time. Crucially in all these markets, there are now fully operational machines using our printheads.

Other Market opportunities

Textiles and Corrugates: Even in established markets like textiles and corrugates there are significant opportunities for revenue growth. The Aquinox printhead, and its embedded ink recirculation technology, enables the reliable use of high-density water-based fluids, allowing for the delivery of very high volumes of pigment in a single pass, with additional benefits to quality and consistency. In collaboration with our ink partners, we have developed sector specific high viscosity aqueous inks for use in conjunction with the Aquinox printhead, thereby overcoming one of the fundamental barriers to the adoption and growth of inkjet technology within these sectors.

M&R, a market leader in textiles, launched its latest product, powered by Xaar's Aquinox printhead, in September 2024. Our technology enables consistently clean, high-quality prints while printing on a wide range of garments. The potential market size for this application is roughly £20 million per annum and we anticipate taking significant market share in the medium term.

Wax: In April 2024, Flashforge (also a market leader within the wax printing market) launched their first product using a single Xaar printhead and pre-orders are now being taken for their three-headed wax machine, Waxjet 530. With the wax market being of a similar scale to the textiles market, and the expectation that our technology will ultimately take a majority share, the opportunity is substantial.

Finally, unlike in ceramics where repeat sales take longer to occur, the printheads in each of our target markets need to be replaced regularly, making revenue more recurring and highly attractive and earnings of a higher quality.

2 https://ir.axalta.com/news/press-releases/detail/656/axalta-and-drr-partner-on-automotive-digital-paint-technology
3 https://full-color-solution.flashforge.com/

While adoption of Xaar printheads within the EV battery coating, automotive coating and desktop 3D markets will be key to the future prospects of the Group, other markets will continue to generate meaningful revenue. This includes the ceramics market where we continue to work with market leaders to develop new products to ensure we are well positioned to generate increasing revenue when market conditions allow. It is these existing markets which will benefit from our ability to offer a complete turnkey solution, and we expect this to further drive demand for our printheads as the barriers to adoption reduce.

Enhanced go-to-market strategy

The problem: The capability of OEMs to integrate our printheads into their existing print machines varies materially. The time taken can be considerable with clients, on occasion, withdrawing from the development process due to the apparent complexity of the process.

The Xaar solution: We have evolved our strategy to work more closely with customers to lessen some of the unique challenges posed by working with high viscosity fluids. Part of this strategy has been to develop, supply and integrate a complete turnkey solution of ink system, ink, waveform and all the other parameters associated with a complete product. This solution can then be provided to other customers within that market, leveraging the initial investment made.

The critical advantage of the provision of a turnkey solution is a significantly reduced time-line from point of engagement to a Xaar embedded solution being fully operational and available for customers to purchase. This has significant benefits to both revenue and customer relationships.

The maturity of the action: In August 2024, M&R took part in the first project to build a complete turnkey solution in an effort to reduce the time to market of a new machine utilising Xaar technology. We provided them with a functioning system which could easily be attached to their material handling system, significantly reducing potential integration issues. The product launched in early September after just six months, whereas previously it would have typically taken three years.

Since then, we have undertaken a second project in collaboration with another OEM which, while still ongoing, is delivering promising results. This approach, along with improving the depth of relationships with OEMs, enables us to develop market ready solutions that we can sell to the wider market, leveraging the initial investment.

The market potential: Although the provision of a complete turnkey solution is not appropriate to all our markets segments, it is relevant in the textiles, Direct to Shape (DTS) and labels embellishment markets. Although a turnkey solution does not expand the market itself, it improves our ability to grow market share and the timeliness of that revenue. Now we have created a solution for the textiles market, we hope to replicate this approach in other markets in the future.

The provision of a turnkey solution does have a cost, but we are of the firm belief that it is an extremely good use of capital, with returns well in excess of the cost of capital.

Operations

During the year we closed the print systems site in Hemel Hempstead and moved manufacturing to Huntingdon as part of ongoing efforts to streamline operations and reduce overheads. All printhead and print system manufacturing is now undertaken at Huntingdon, with ink systems produced in Kettering and the majority of R&D undertaken in Waterbeach.

> **Our High Viscosity technology is creating significant interest across a number of markets.**

After a shop floor reorganisation in 2023, the Huntingdon facility has the capacity to deliver over twice the current output, providing us with the ability to ramp-up output without incurring significant capital expenditure. As volumes increase, so will cost recovery per unit with the resultant benefit to margins.

At head office entity level, we made significant savings, largely due to the completion of business restructuring plan at the end of 2023 which reduced employment costs in 2024.

Disciplined cash management remains a priority, with a focus on improving product cost and manufacturing process efficiencies on a day-to-day basis rather than as part of specific large-scale initiatives.

FFEI

During 2024 we completed the disposal of the Life Sciences part of the business and moved print systems manufacturing from Hemel Hempstead to Huntingdon. Going forward FFEI products will be sold under the Xaar brand. FFEI printbars continue to play an important role in our strategy as they further facilitate the use of our technology into OEM machines. Challenges when integrating our printheads into third party printbars have historically caused product delays. By developing printbars and printheads together, we can provide a solution without such issues arising. This makes it easier for OEMs to utilise our technology, ultimately allowing us to sell more printheads.

Megnajet

As with FFEI printbars, Megnajet ink systems continue to help facilitate the integration of Xaar printheads into OEM machines. In 2024 we have increased our focus on Group projects. Several new product launches, including OmniFlo, are key to exploiting Xaar's High Viscosity and High Pigment capability and enhancing offerings into target markets such as textile and advanced/additive applications.

Engineered Print Systems

EPS remains largely separate to the rest of our business with a distinct strategy and business model as it utilises both Xaar and competitor printheads. Amidst a difficult market backdrop, we have taken steps to strengthen the leadership of this business to focus on a return to growth.

Going forward, while we anticipate volatility in costs and market pricing as expected tariffs take effect, our focus will be on strengthening the customer pipeline while optimising the supply chain to reduce the effects of higher input costs. Because of the terms of the deals we negotiate, upon closure, revenue is generated over the next twelve to twenty-four months, based on project percentage of completion. Hence our focus on strengthening the pipeline and conversion will only provide returns in future periods rather than 2025.

KPIs

→ Read more about our Key Performance Indicators on pages 11 to 12

Risks

→ Read more about Risk management on pages 13 to 20

Strategic update
continued

Sustainability

During the year, we created a new ESG Roadmap to replace our current Sustainability Roadmap. Developed by a cross-function team of 21 people from across different departments, the new Roadmap consists of updated milestones, more realistic targets and a new Governance pillar. Most notably we re-baselined our emissions targets which previously targeted reaching Net Zero across Scope 1, 2 & 3 by 2030. Now, in line with the UK Government and the Paris Agreement, we are aiming to reach Scope 1 & 2 Net Zero by 2030, a 45% reduction in Scope 3 by 2040 and Scope 3 Net Zero by 2050.

Our Roadmap has five key pillars – Environment, People, Innovation, Community and Governance; its purpose is to drive our ESG goals beyond the traditional focus of Scope 3. We enable our customers to become more sustainable by using our printheads which need less ink, require less time to dry and use less energy consumption. Our research shows that, compared to analogue alternatives, digital has a significant impact in reducing energy consumption (by as much as 55%), water consumption (by up to 60%) and CO_2 emissions (by up to 95%).

Xaar benefits from a strong ESG governance structure. Our cross-functional ESG Committee has accountability to the Board. This group brings together a wide range of skill sets as well as a shared determination and passion for a more sustainable future. Our CFO Paul James has specific Board responsibility for ESG matters. We will publish our 2024 ESG report later in the year. This report will provide furthers detail of our ESG programme, including progress against each of our pillars.

Outlook

The Group enters 2025 with renewed optimism as several, potentially significant, market opportunities start to gain momentum. Over the medium term, these opportunities should deliver meaningful revenue at attractive margins, and we see these as major drivers of shareholder value growth over the medium to long term.

In the short term, in Printhead, early progress in the new business areas is now more than offsetting the ceramics market's decline. In EPS, the slow-down in end markets is expected to continue to impact revenue and profit as the pipeline is rebuilt.

Having proven capability and already secured some key customer orders and partnerships in Printhead, we are confident that we will continue to make strategic progress whilst recognising that how this translates to near term revenue and profitability will be dependent on market dynamics and the timing of customer decisions to adopt OEM products. Whilst this plays out, we will continue to manage operating costs and cash tightly and maintain a strong balance sheet.

Andrew Herbert
Chairman

24 March 2025

Business performance

Revenue

The Group achieved revenue of £61.4 million, a year-on-year decline of 13% (2023: £70.2 million). The largest contributor to this was EPS, which saw revenue decrease 27% to £16.1 million (2023: £22.1 million). EPS was unable to replace revenue generated in 2022 and 2023 from a multi-year, multi-unit order from a single customer which was completed in early 2024. Growth in focus markets within the Printhead operating segment, including Direct-to-Shape (DTS), Advanced Manufacturing and Textiles, is masked by a reduction in ceramics revenue. This fell more sharply than anticipated due to a significant decline in the Chinese construction industry, which continues to cause weakness in the global ceramics tile market. Printhead revenue fell 10% to £33.5 million (2023: £37.1 million) as a result. FFEI grew 7% to £9.3 million (2023: £8.7 million) as a result of enhanced last-time orders driven by its exit from the Life Sciences segment, and Megnajet revenue grew 7% to £2.5 million (2023: £2.3 million) due to significant order growth from one customer who went through a period of de-stocking in 2023.

Printhead

Xaar offers a wide range of industrial inkjet printheads which are designed and produced to meet customer-driven requirements in markets including textiles, graphics, packaging, 3D printing and additive manufacturing.

New business grew 23% to £18.9 million in 2024, up from £15.4 million in 2023. New business revenue is defined as income from OEMs using our technology, such as the Nitrox, Aquinox or Irix printheads, that has been launched since 2019. Hence, new business impacts all of our reported end-use sectors.

Printhead revenue growth excluding Ceramics and Glass increased by 20%, to £26.0 million for 2024 (2023: £21.6 million). The Coding & Marking (C&M) and Direct-to-Shape sector revenue grew £2.0 million to £13.2 million, as we continued to launch new products and iterations within the existing printhead portfolio. Packaging and Textiles, which includes our partnership with M&R, saw substantial revenue growth, up more than 400% to £2.0 million in 2024. However, this progress continues to be masked by a decline in revenue from Ceramics and Glass from £15.5 million to £7.5 million. While revenue from this sector has fallen faster than anticipated, we expect the decline in revenue to be bottoming-out, thereby limiting this as a future expected headwind within Printhead.

Overall, we have retained market share, with new business revenue growing strongly. This provides confidence that this division will soon be returning to sustainable growth.

Engineered Print Systems

EPS manufactures a range of highly customised product print systems, printing all kinds of industrial and promotional objects such as tools, appliances, sports equipment and toys. The business is split between digital inkjet machine sales (2024: 54% of revenue), pad printing sales (2024: 35% of revenue) and servicing (2024: 11% of revenue).

Revenue reduced by 27% year-on-year. This was primarily due to the completion of a multi-year, multi-unit order from a single customer early in 2024, distorting comparisons to 2023. The completion of this contract was the main driver for the decline in both digital inject revenue and pad printing which fell 39% and 19% respectively. We were unable to replace this contract with new business during the year as a consequence of market uncertainty causing new customers to delay switching to digital from analogue. Within EPS, we saw strong revenue growth in the servicing division where existing customers chose to increase spending on maintaining existing machines and delay new capital expenditure.

Yet, EPS will likely remain a drag on Group profitability during 2025 as new management focus on turning this business around by reducing over reliance on specific customers by widening the customer pipeline, leading to growth beyond 2026.

FFEI and Megnajet

FFEI develops high performance digital imaging solutions – from digital inkjet label presses to digital pathology scanners. Its inkjet products – print engines – use Xaar printheads. Megnajet specialises in the design and manufacture of industrial fluid management systems for digital inkjet and these are the most integrated and compact ink systems in the market today.

FFEI revenue was £9.3 million (2023: £8.7 million) with growth primarily driven by last-time orders from the life-sciences segment of the business which was disposed during the year. This part of the business was the dominant driver of revenue for FFEI. As part of efforts to directly deliver a more complete system, the printbar portfolio has been incorporated into the Printhead business to then sell to OEMs.

Megnajet delivered £2.5 million of revenue, growth of 7% year-on-year, mainly due to significant orders from one customer who went through a period of de-stocking in 2023. While third party revenue growth is encouraging, our main focus is on Group projects, with a 44% uplift in sales since last year in intra-group transactions to Xaar. Xaar and EPS remain two of Megnajet's biggest customers.

Gross profit

Gross profit decreased by £4.7 million to £22.2 million (2023: £26.9 million) with proactive cost management decisions protecting gross margin at 36% (2023: 38%) despite increased energy costs and reduced sales volumes in Printhead and EPS and actions to reduce inventory.

Printhead gross margin decreased by 2 percentage points year-on-year. However, as sales volumes improve and energy costs stabilise, we expect gross margins to improve in the medium term. Within EPS, gross margin decreased by 10 percentage points as a result of high fixed costs and lower sales volume. Gross margin for FFEI grew 8 percentage points due to improved pricing during the completion of the last time buy orders which included extra requirements beyond those anticipated.

Group revenue growth

£m	2024	2023	Var	Var %
Printhead	**33.5**	37.1	(3.6)	10%
EPS	**16.1**	22.1	(6.0)	(27.1)%
FFEI	**9.3**	8.7	0.6	7%
Megnajet	**2.5**	2.3	0.2	7.1%
Total Revenue	**61.4**	**70.2**	**(9.2)**	**(13.0)%**

Revenue by Sector

£m	2024	2023	Var	Var %
Ceramics & Glass	**7.5**	15.5	(8.0)	52%
C&M & DTS	**13.2**	11.2	2.0	18%
WFG & Labels	**3.5**	3.6	(0.1)	3%
3D Printing & AVM	**7.3**	6.4	0.9	14%
Packaging & Textiles	**2.0**	0.4	1.6	400%
Total Revenue	**33.5**	**37.1**	**(3.6)**	**10%**

Business performance
continued

Megnajet successfully grew gross margin by 18 percentage points, to 50% in 2024 (2023: 32%), due to operational improvements including labour utilisation and improved pricing decisions. We anticipate gross margin at Megnajet to normalise at c.40% in the medium term.

Research & Development

Gross R&D investment was £5.3 million (2023: £5.6 million), or 8.6% of revenue, slightly above the prior year (2023: 8.0%). We are continuing to invest, having reached our target ratio of 8-10% for R&D investment as a percentage of revenue.

While historical R&D investment has focused on widening our product offering, we are currently directing the majority of R&D investment towards helping OEM companies integrate our technology into their machines. This includes but is not limited to the recent development of a successful complete turnkey solution which proved so successful for M&R in the textiles market.

Operating expenses

While we have continued to face inflationary headwinds in areas such as energy costs, we have been successful in our efforts to manage expenses across the Group. The sales and marketing expense was £4.6 million (2023: £5.4 million), reflecting the continued focus on cost management. General and administrative expenses decreased to £11.6 million from £14.6 million in 2023. This reduction reflects the progress made throughout 2023 and as some efficiency projects were only finished at the end of the year, these savings were realised in 2024. As previously mentioned, FFEI printbar manufacturing transitioned to Huntingdon during the first half of the year and the Hemel Hempstead site has since been closed.

Profit for the year

Adjusted profit before tax was £0.3 million, a decrease from £2.9 million in 2023. This was principally due to reduced profitability in the Printhead and EPS businesses, as a consequence of lower sales volumes putting downward pressure on margin. All businesses continue to generate meaningful profit. We are making progress managing head office costs (on an adjusted basis) of £5.9 million in 2024 compared to £6.5 million in 2023. These savings have been achieved because of reductions in employee, travel and insurance costs..

In calculating the adjusted profit before tax, the following significant items, which management consider to be one-off or non-recurring in nature, have been excluded from the £11.4 million loss before tax (2023: £2.7 million loss); fair value losses on financial assets of £5.6 million (2023: £0.4 million) arising due to an expected reduction in third-party revenues underlying the Xaar 3D contingent consideration earn-out; costs relating to the rationalisation of the Digital Imaging business (£1.2 million, 2023: £nil); £1.0 million redundancy costs (2023: £0.8 million); share-based payment charges of £1.1 million (2023: £1.9 million); impairment of contract assets recognised in prior years not expected to be collected in full (£0.5 million, 2023: £nil); and £2.2 million amortisation of acquisition intangibles, inclusive of an impairment to Digital Imaging customer relationships asset (2023: £1.4 million).

Adjusted EBITDA in the period was £3.7 million (2023: £6.4 million).

Cash flow and balance sheet

The Group retains a strong balance sheet, with a net cash position at 31 December 2024 of £8.7 million, representing a net cash inflow of £1.6m during the period (2023: £7.1 million). This improved cash balance is reflective of the Group's ongoing focus on careful liquidity management. This was driven by £6.6 million positive cash flow from operating activities, offset by deferred consideration payments of £2.1 million (2023: £1.7 million), lease payments of £1.2 million (2023: £1.1 million), capital expenditure of £0.9 million (2023: £1.5 million) and movements on receivables finance borrowings resulting in £0.9 million cash outflow (2023: £0.9 million inflow).

The Group works hard to manage working capital efficiently and it is pleasing that 2024 saw an overall reduction in trade balances of £3.5 million to £30.4 million (2023: £33.9 million), which contributed to the cash inflows from operating activities. Inventory reduced by £3.8 million to £27.2 million (2023: £31.0 million) and trade receivables decreased by £1.3 million to £5.9 million (2023: £7.2 million), whilst trade creditors reduced by £1.5 million to £2.8 million (2023: £4.3 million).The Group has a Revolving Credit Facility (RCF) of £5 million in place with our lead bank, HSBC, to ensure we have adequate resources to invest in the Group and our operational capability when required. To date, our effective cash management has meant the facility remains undrawn. During Q1 2025 the term of the facility was extended by one year, to June 2026.

Non-current assets of £33.4 million decreased by £12.2 million during the year. As the Group's cash focus continued, there was a £2.0 million reduction in property, plant and equipment as new purchases were controlled and prioritised. The consideration receivable balance related to the earn-out following the divestment of Xaar 3D was revalued to £4.9 million in the year, with the non-current element of this reducing from £8.3 million to £3.1 million. This revaluation was driven by a downward re-estimate of third-party revenues underpinning the earn-out. The remaining significant movements in the carrying value of non-current assets predominantly related to annual depreciation and amortisation of assets in line with their useful economic life for the business, as well as a modification and impairment of the FFEI property lease under IFRS16, resulting in a reduction in the right of use asset value.

Current assets reduced by £4.5 million from £51.7 million as at 31 December 2023 to £47.2 million. As described above, working capital asset balances reduced year-on-year, due to proactive management, directly improving cash flows from operating activities, and contributing to the £1.6m increase in cash and cash equivalents. The revaluation of contingent consideration assets resulted in a £0.4 million reduction in the current element to £1.9 million (2023: £2.3 million), with the next significant milestone payment assumed to have been delayed by one year but with an expectation of an overall reduction in short-term royalties receivable. Contract assets reduced by £1.2 million since 31 December 2023 to £1.0 million (2023: £2.2 million) due to the discontinuation of the Life Sciences product lines at FFEI and a smaller project pipeline at EPS.

Non-current liabilities totalled £5.0 million, a year-on-year reduction of £2.2 million, all relating to lease liabilities payable in more than one year. The change predominantly reflects the modification of the lease for FFEI's property in Hemel Hempstead, bring the end date in line with the break clause when we plan to exit.

Current liabilities of £13.5 million have reduced by £5.1 million compared to the prior year (2023: £18.6 million). This majority of this movement is driven by a £0.8 million reduction trade and other payables, £0.8 million reduction in amounts borrowed against the Group's receivables financing facilities, £0.4 million lower provisions balance resulting from increases in legal provisions offset by utilised restructuring provisions, and £2.1 million of deferred consideration paid in the period.

The business has a clear plan and strategy which its healthy balance sheet and cash position will support. At present, we are focusing investment internally to ensure we have the operational capacity and efficiency to meet future demand, alongside investment in our product roadmap development. We remain focused on capitalising on market opportunities, ensuring we are able to rapidly response to demand requirements. We will continue to review our approach to inventory levels, with a medium-term aim to reduce it as demand becomes more stable.

Dividend

No dividend has been declared in respect of the year. The Board regularly reviews its capital allocation policy and believes that prioritising investment to enable profitable growth for the Group is currently the most appropriate use of capital, achieving the best medium-term return for shareholders.

Key Performance Indicators

Measuring our success

We monitor progress against the delivery of our strategic goals using financial key performance indicators (KPIs).

The Company uses a number of alternative performance measures (APMs) in addition to those reported in accordance with IFRS. The Directors believe that these APMs, shown, are important when assessing the underlying financial and operating performance of the Group and its divisions, providing management with key insights and metrics in support of the ongoing management of the Group's performance and cash flow. A number of these align with KPIs and other key metrics used in the business and therefore are considered useful to also disclose to the users of the financial statements.

The following APMs do not have standardised meaning prescribed by IFRS and therefore may not be directly comparable with similar measures presented by other companies.

→ **See note 9 of the Group's Consolidated Financial Statements, for reconciliation between adjusted and statutory items**

2024 figures and 2023 comparative figures are based on continuing operations (where relevant), and are subject to rounding.

Revenue

Statutory

£61.4m

2024	£61.4m
2023	£70.2m

Total revenue for the Group was £61.4 million, a decrease of £8.8 million year on year (2023: £70.2 million). Revenue decreased 13% year on year.

Revenue by sector

INDUSTRIAL

£42.7m

2024	£42.7m
2023	£55.0m

GRAPHIC ARTS

£3.5m

2024	£3.5m
2023	£3.6m

PACKAGING

£15.2m

2024	£15.2m
2023	£11.6m

The decline in Industrial is equally driven by an overall decline in the PPS business and Printhead ceramics market. The growth in Packaging is equally driven by growth in Printhead textiles, and coding and marking.

Revenue by region

EMEA

£24.0m

2024	£24.0m
2023	£27.8m

The £3.8 million reduction in EMEA revenue is driven by a £5.8 million reduction in Printhead, predominantly due to declines in the ceramics market. This is partially offset by improved revenues in FFEI due to last-time-buy on Life Science products.

ASIA

£9.7m

2024	£9.7m
2023	£12.2m

2023 benefits from £3 million sales of single pass machines from PPS into Japan which do not repeat in 2024.

AMERICAS

£27.7m

2024	£27.7m
2023	£30.2m

Reduction driven by PPS where market uncertainty has delayed new customer conversion from analogue to digital.

Key Performance Indicators
continued

Profit

Statutory

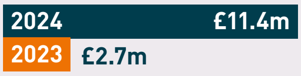
GROSS MARGIN

36%

Proactive cost management decisions protecting gross margin at 36% (2023: 38%) despite increased energy costs and reduced sales volumes in Printhead and PPS.

LOSS BEFORE TAX

£11.4m



Loss before tax represents operating loss after investment income and finance costs (2023: £2.7 million).

BASIC LOSS PER SHARE

£13.5p

The calculation of basic loss per share is based on the weighted average number of ordinary shares outstanding during the period (2023: 3.0p). See Financial Statements – note 13 for further information.

Alternative Performance Measures (APMs)

ADJUSTED PROFIT BEFORE TAX

£0.3m

Adjusted profit before tax represents the profit before tax adjusted for recurring and non-recurring items. Reconciliation of adjusted financial measures is provided in note 9.

ADJUSTED BASIC (LOSS) / EARNINGS PER SHARE

£0.7p

Earnings per share adjusted for the impacts of adjusting items and share-based payment expense. This measures the growth and profitability of the Group operations.

Cash

Statutory

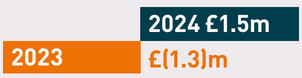
CASH & TREASURY DEPOSITS

£8.7m

Cash and cash equivalents comprise cash at bank of £8.7 million (2023: £7.1 million).

NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS

£1.5m



Cash inflows in the year were driven by operating cash flows as well as a conscious reduction in inventory levels. These inflows were partially utilised through capex £1.0 million, lease payments £1.2 million and the final deferred consideration payment of past acquisitions of £2.1 million.

Alternative Performance Measures (APMs)

R&D INVESTMENT

£5.3m

Group R&D investment exclusive of any capitalised costs. Reflects a focus on helping OEM's integrate our technology and maintains R&D spend within Xaar's target of 8-11% ratio to revenue.

Risk management

Measuring our risks

Key risk areas

The risks around our business are set out in more detail on pages 15 to 19, but the key risk areas can be identified as being associated with the following:

Market

Risk owner: CEO John Mills

1. **Competition**
   Monitoring and adjusting to competitive dynamics such as pricing/promotion, innovation, resource investments and market share changes.
2. **Identification of market requirements**
   Successfully developing products with the characteristics that meet market requirements within the necessary time-scale.
3. **Commercialising and maintaining products with cutting edge technology**
   Creating value by generating innovative products that deliver significant customer benefit.
4. **Merger and acquisition opportunities**
   Seek opportunities to expand, create synergies and generate greater shareholder value.

Operational

Risk owner: COO Graham Tweedale

5. **Climate change**
   Identifying risks and scenario planning of physical and transition impact upon operations and developing mitigating actions.
6. **Organisational capability**
   Having the right people in the right roles.
7. **Partnerships and alliances**
   Working with the right companies, at the right time on the right terms to deliver long-term value.
8. **Supply chain**
   Optimising sourcing and supply chain relationships to drive performance and minimise operational issues.
9. **War and conflict**
   Staying resilient in the face of a challenging world economy.
10. **Laws and regulations**
   Compliance with key laws and regulations in all countries Group operates in.

IT

Risk owner: CFO Paul James

11. **IT systems and control environment**
   Strengthen IT infrastructure and key IT systems. Enhance and build resilience by investing in and implementing new IT infrastructure or IT systems.
12. **Cyber security risk**
   Loss of systems or confidential data due to a malicious cyber-attack, leading to disruption to business operations and loss of data.

Financial

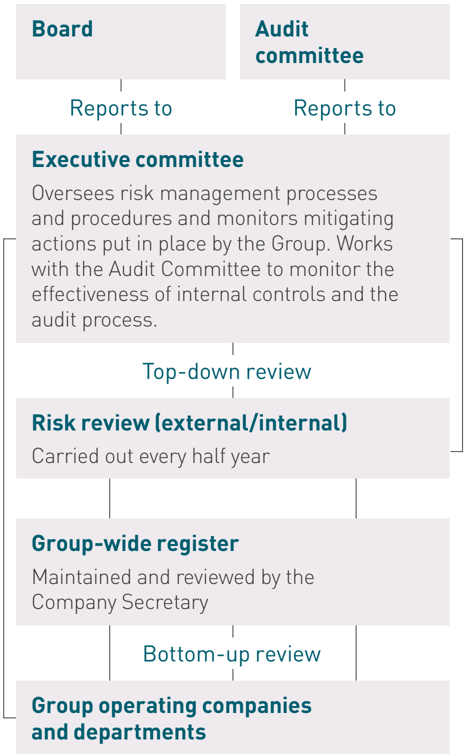
Risk owner: CFO Paul James

13. **Ability to access sufficient capital**
   Ability to access sufficient capital to fund growth opportunities.
14. **Customer credit exposure**
   Offering credit terms ensuring recoverability is reasonably assured.
15. **Inventory obsolescence**
   Holding excess inventory levels when compared to demand, that leads to increased risk of obsolescence and write-off before consumption.
16. **Exchange rates**
   Monitoring global economic events and mitigating any resulting significant exchange rate impacts.
17. **Fraud and Management Override**
   Inherent risk in an organisation that management controls will be overridden by individuals.

Risk management
continued

Effective risk management is key to our success against the dynamics of the industry that we operate in and the characteristics of our chosen business model.

Risk management responsibilities



Risk management strategy and framework

To safeguard the assets of the Group and to ensure the Group's resources are appropriately managed, we should have effective processes to identify key risks and mitigate them. This is achieved through having appropriate policies and internal control frameworks.

The Executive Committee oversees risk management as part of its decision-making process. It reviews the principal risks and key changes twice a year. All departmental risk meetings take place, where all relevant risks are discussed, ratings re-evaluated, and current and future mitigating actions are considered. The risk register is updated after these meetings and is reviewed and considered by the Executive Committee as part of their principal risks' evaluation.

After all risks and proposals are approved by Executive Committee, the principal risks are then presented to the Board and the Audit Committee for their final review and approval.

Key updates since 2024 Interim Results

Organisational Capability – decreased

Following the restructuring of the workforce in 2024 to reduce costs, the company focused organisation capability to concentrate on revenue generation. As a result, we rely more heavily on outside advisors and outsources to perform more routine tasks. Actions have been taken to ensure that management have the necessary oversight. The risk has therefore reduced.

War and conflicts – revised

The impact on the world economy and geo-political environment of the war and conflicts, continues to be monitored. The Board has revised the description to cover the risk to the Group from other potential wars and conflicts, not just Ukraine and the Middle East.

Inventory obsolescence – reduced

The impact of this risk has been reduced following changes to the inventory review process. There has been improved monitoring of inventory with the enforcement of lead times for customers' orders to ensure the most accurate forecast is in place.

Exchange rates – decreased

The impact of this risk has been reduced. There is a partial natural hedge for foreign currency movements, with sales companies and suppliers spread out globally. Exposure is tracked monthly and factored into cash flows.

Fraud and management override – new risk

Following a review of the Risk Register, it was decided to add a new principal risk dealing with the possible override of management controls related to fraud.

The description of principal risks on pages 15 to 19 show the change in position in terms of likelihood and magnitude since 1 January 2024.

Compliance

The Board has applied Principle O of the UK Corporate Governance Code 2018 by establishing a continuous process for identifying, evaluating, and managing the significant risks the Group faces which has operated throughout the year and up to the date of this report. The internal control and risk management system is designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance with respect to the preparation of financial information and the safeguarding of assets against material misstatement or loss. For all those risks, we were able to identify identical risks in the principal risks we disclose in this report.

These also comply with the FRC guidance on risk management, internal controls and related risk financial and business reporting.

Emerging Risks

The Board periodically reviews emerging risks, to consider and evaluate the potential impact of newly identified risks against current principal risks.

On review, it was determined that these emerging risks were appropriately captured by the Group's existing principal risks, or risks or were not significant enough to be deemed a new principal risk. As part of the annual risk review, the Board therefore concluded that no significant emerging risks have been identified in 2024. In 2025, the Board is monitoring the potential impact on the Group of the prospective imposition of cross-border trade tariffs by various countries following recent pronouncements led by the USA.

Approach to risks

The first approach to managing these risks is to have high quality leaders and teams within the business functions that proactively monitor and adjust to risks that could impact effectiveness.

Probability rating

The probability rating is the likelihood of an event occurring based on previous experiences, historical information, and professional judgement with respect to the incident in the territory or industry. Probability can be subjective and is not an exact science. The probability of an incident occurring can be estimated to give a probability rating. This gives an overall view of the risk exposure faced by the business.

Impact rating

The impact of an incident can be measured in terms of human suffering, damage to assets, interruption to operations or business, effect on customers, impact on reputation/brand and financial loss. The calculation of the impact rating should be taken as the worst case in respect of these categories.

The financial element of the impact rating is the amount of money that is 'at risk' designation.

This 'at risk' means that it is either revenue at risk, or the cost of rebuilding a system, or replacement cost of hardware. This must be taken in the context that there are limited recovery capabilities and that revenue at risk is not a daily amount, but the amount of revenue that would be lost until the process, system or business function can be reinstated.

Risk and link to business unit	Impact	Mitigation	Likelihood/Magnitude Change since 1 January 2024
Market			
1. Competition	Failure to continually improve may mean that we lose market share or have to reduce prices. Since there are fixed factory costs, reductions in sales volumes may substantially reduce profit margins. We are the only true independent printhead Company in the world and we are competing with vertically integrated, large scale, multinational companies.	Competitive pricing policies are employed and product portfolios and pricing are constantly monitored. The realignment of our go-to-market capabilities allows us to focus more on our customers and to deliver requested products into the OEM marketplace. Production efficiency improvement programmes are established to ensure that cost bases remain competitive within the marketplace. Regular communication and sharing of information with customers and partners to enhance 'peer-to-peer' relationships. Market reports and other reliable sources are reviewed to improve demand forecasting. Continued investment in innovative technical solutions for development of new applications from existing technologies and launch new technologies.	Unlikely **Very High – no change**
2. Failure to identify market requirements	Products need to meet the changing demands of the market, including regulatory changes. Failure to meet future market requirements/specifications could impact on long-term revenue and profit.	Regular, specific and detailed reviews are held to assess current and anticipated market requirements, including expected regulatory changes. These reviews include regular customer visits between senior executives, technical experts and R&D team members to develop a culture of innovation that focuses on delivering technical solutions to original equipment manufacturers' (OEMs) requirements. Product developments are selected on appropriate criteria. Product development activity is properly managed with regular reviews of progress against project plans, and gated milestone reviews. We have a rigorous product life cycle management process which ensures we deliver against our customers' requirements.	Possible **Very High – no change**
3. Commercialising new products	Failure to test new products under all relevant application conditions could lead to unexpected costs with customers unable to integrate into their products due to quality failures, resulting in reputational damage.	New products are thoroughly tested before launch. Xaar's manufacturing facilities are ISO 9001 accredited. We proactively engage with customers for all new products to ensure all incompatibilities are reviewed quickly using a consistent and thorough investigation process.	Possible **Very High – increase**
4. Merger and acquisition opportunities	Our strategy is predicated primarily on organic growth. Failure to realise the expected benefits of an acquisition or post-acquisition performance of the acquired business not meeting the expected financial performance at the time acquisition terms were agreed could adversely affect the strategic development, future financial results and prospects of the Group.	The Board reviews the Group strategy annually. Each acquisition is thoroughly reviewed by the Board at each stage. Whenever a potential for M&A is identified, robust modelling of the opportunity is undertaken through involving third-party subject matter experts. The competence and independence of the third-party involved gets assessed separately by the Board. Professional due diligence is a required step in any acquisition. Senior management and the Board monitor customer and supplier activity through regular meetings and other sources such as industry gatherings. Senior management reviews any relevant M&A activity in the market and decides on specific actions to defend Xaar's position. The overall landscape is constantly reviewed with assistance from external advisors.	Possible **Medium – no change**

Risk management
continued

Risk and link to business unit	Impact	Mitigation	Likelihood/Magnitude Change since 1 January 2024
Operational			
5. Climate change	Climate change is not only a future challenge. The IPCC report in 2021 was declared a 'code red for humanity'. The IPCC, IEA & COP26 have re-enforced the changes that are required to rewire the economy to a low-carbon manufacturing one – and the climate impacts that are expected in a range of scenarios. The impact of Climate change can be specified as: **a.** the physical risks that may impact the assets of the business, and cause business disruption (e.g. flooding), and extreme weather events that may negatively impact the supply chain, to the increases in temperature that will impact human activity and the global supply chain, at an extreme level this could negatively impact the global economy and cause mass emigration from emerging economies **b.** the transition risks in managing the shift to a low-carbon economy, and investment/expenditure to manage the transition and remain viable – the potential for reputation damage should the transition be poorly executed or risk of 'green washing' if announcements are not supported by actions that are measurable.	Investigating and reporting on climate-related risks and opportunities in adherence to internationally accepted recommendations, such as those published by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). The assessment of the risks associated with climate change can also identify opportunities that arise to help potential customers reduce their emissions and increase efficiencies by using digital printhead solutions, as set out in the TCFD disclosure. **Physical risks:** + Major incident plans are in place with specific provisions for areas most exposed to potential risks (flood, fires, hurricanes etc.) + Geographic spread of the business limits the impact to our customers. Our sourcing strategy takes into account risks associated with our key suppliers + We completed climate scenario planning across two climate scenarios (e.g. RCP 2.6, RCP 8.5), using RCP 8.5 to identify risks and recommendations for key mitigation measures and resilience consideration + The review examined Xaar sites globally and our top 10 critical supplier sites using 12 separate climate models, in each case the RCP 8.5 model was used to assess risks at the most extreme expected temperature rises (4.5°C). The report concluded physical risks are low to very low in almost all cases. The remaining risk is not material, however the actions are being developed to address those further. **Transition risks** + Develop Sustainability Roadmap to deliver 'Net Zero by 2050' + Outline metrics and targets in support of reducing greenhouse gas emissions and developing Science Based Targets to 1.5°C across Scope 1, 2 & 3 emissions. Carbon pricing presents a £1.3 million risk if no actions were taken to reduce the Supplier Scope 3 impact before 2030 (model suggests it is around 21,000 tCO_2e in 2022) + Continue reducing carbon use to minimise impact, and to become a low-carbon manufacturer + Analyse Supply Chain Infrastructure Risk Exposure + Identify 'spend to save' projects that are cash generative + Continue GHG mitigation actions to maintain a carbon neutral position + Develop transparency and credibility in 'net zero' commitments with verifiable plans and progress in both near-term and medium-term action plans.	Possible **Medium – no change**

Risk and link to business unit	Impact	Mitigation	Likelihood/Magnitude Change since 1 January 2024
Operational continued			
6. Organisational capability	Our people remain key to our business. Ensuring the right people are in the right roles is critical to our future success and growth. Operations in remote locations or highly competitive markets make attracting and retaining skilled employees challenging. We need to attract and retain the right talent to enable achievement of our strategic aims. Failure to do this risks delivery and growth. Key management personnel are critical to success of our business. Losing them without adequate succession planning could have a significant impact on the Group's performance.	Our focus is to minimise the voluntary turnover of employees, through better hiring for fit, improved induction procedures and employee engagement initiatives. The Group reviews remuneration to ensure that the appropriate reward packages accompany a fulfilling work environment. Annual performance management reviews for the majority of employees to identify talent and develop key employees. Investment to build a learning organisation with focus on culture, reward and recognition. Succession plans are being developed to highlight key personnel risks with mitigation plans being developed. Campaigns to increase performance and development of communication between managers and employees to ensure alignment to Company objectives.	Possible **Low – decreased**
7. Partnerships and alliances	If key partners we have alliances with are acquired, this can change the relationships they have with us.	The Legal team conducts extensive reviews of legal agreements and in particular IP with such partners. Partnerships are constantly reviewed both internally and with those partners at the most senior level to develop long-term partnerships and supply agreements to the benefit of both parties. Where significant investment and research is undertaken there will be contractual arrangements to ensure appropriate governance and Board structure to support the business and product development.	Possible **Medium – no change**
8. Supply chain	The Group is dependent on retaining its key suppliers and ensuring that deliveries are on time and the materials supplied are of appropriate quality. There has been a shift from a finished goods risk to a component materials risk particularly where components have a single source of supply. There are challenges with the supply of some key components that are used in production and global logistics routes have experienced some disruption.	Focused on monitoring and securing continuity of supply of components necessary to maintain production and the supply of printheads for the following 18 months. We conduct regular audits of our key suppliers and in addition keep large amounts of safety inventory of key components, which we also regularly review. Dual sourcing for critical components is in place for some suppliers, and there is ongoing work to extend this to the full list of critical suppliers. We will continue to diversify and localise our supply chains, and investigate developing a circular manufacturing approach by recovery of materials from finished goods to be re-utilised in production.	Possible **High – no change**
9. War and conflicts	The war in Ukraine continues to impact the near-term outlook for the UK and global economies and increased uncertainty over the path ahead. Although energy prices have continued to stabilise in 2024, they continue to be a concern for the UK economy which also result in further upward pressure on inflation and a potential hit to GDP growth. The conflict between Israel and Hamas has further destabilised the Middle East and disruptions to shipping in the Red Sea may impact the supply chain.	We have fixed our unit electricity costs and will continue to do so in future. We have been proactive in buying materials and components to enable continued production. We have no direct operations in Ukraine, Russia and the Middle East. We completed a factory restructuring in 2023, which made the production process more efficient, driving reductions in cost of sales. We have secured some key long-term contracts (both sales and procurement) and supply chains outside of unstable countries and regions.	Probable **Medium – Reduced**

Risk management
continued

Risk and link to business unit	Impact	Mitigation	Likelihood/Magnitude Change since 1 January 2024
Operational continued			
10. Laws and regulations	There is a risk that the Group may not be compliant with existing laws and regulations in the UK and other countries the Group operates in. This could be manifested through liabilities around employee accidents or consequences of environmental damage, breaches of export controls and customs, lack of awareness of economic sanctions and product liability claims.	We have relevant certifications in respect of quality management and environmental management with the appropriate bodies including ISO. The quality of supplies is constantly monitored. Quality performance is regularly reviewed by senior management who apply appropriate resources to systematically address recurrent problems. New products are thoroughly tested before launch. All contracts go through legal review before signing. For all complex transactions relevant third-party experts are engaged to evaluate all legal risks and adequately respond to them.	Possible **High – increased**
IT			
11. IT systems and control environment	IT networks, infrastructure, and business systems resilience is not sufficient causing access issues for end users. Inability to operate effectively or loss of operating capability. Loss of information, incurring financial or regulatory penalties. Fraud committed through manipulation of IT business systems or data.	Investment has been made to move to a hybrid cloud model, strengthen the resilience and security of our IT infrastructure, rationalise and modernise our business systems, and realign systems with improved operational business processes. Developed the IT Service Delivery maturity and increased capacity in the Group IT function. Access to systems and data is only provided on a 'need-to-know' and 'least privilege' basis consistent with the user's role and requires the appropriate authorisation. Key business systems are being developed to strengthen IT system controls and further reduce the burden from manual controls.	Possible **High – no change**
12. Cyber threat and information security	Malicious cyber-attack breaches IT security potentially leading to: A loss of IT infrastructure, business systems, or data. Disruption to business operations, ranging from inability to operate effectively to a complete loss of operating capability. Unauthorised access to confidential or personal data and disclosure externally. Breach of information security and data protection regulations incurring financial penalties from regulators. Reputational impact and potential deterioration in customer and supplier relationships. Loss of Intellectual Property or exposure of commercially sensitive information. Extensive resources expended in responding and recovering.	Implemented a Multi-Factor Authentication solution for VPN. MFA rolled out to protect key business systems including CRM and HR. Enterprise Backup Solution provides an immutable copy of all key business systems and data enabling complete systems and data recovery within an acceptable time frame. Implemented a risk-based security testing approach across IT infrastructure and systems to identify ongoing vulnerabilities and prioritise remediation. Included a security work stream in the IT Transformation Programme. Group IT Director provides an Information Security update to the Executive on a monthly basis and to the Board of Directors every six months. Established Xaar Security Standards (Minimum and Enhanced Baselines) to measure current levels of defence and recovery and track progress. Established a process of undertaking an independent external audit of Xaar IT Security and IT Security Technical Controls on an annual basis.	Possible **High – increased**

Risk and link to business unit	Impact	Mitigation	Likelihood/Magnitude Change since 1 January 2024
Financial			
13. Ability to access sufficient capital	Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organisation, as well as the strategic plan and vision. Significant investment is required to bring new products to market and ramp up to meaningful volumes.	The Group has sufficient cash available for execution and delivery of the strategy within agreed time-scales. The Group has implemented cost reduction actions to focus resources on key initiatives. We work with third parties to realise the full potential of research and development activities. We have established partnerships with our banks who understand our strategic plans. We have a strong, well capitalised balance sheet. We returned to profitability which transformed our ability to raise less expensive financing. We have secured an invoice facility and a RCF which helps support short-term cash management.	Unlikely **High – no change**
14. Customer credit exposure	The Group may offer credit terms to its customers which at times could be extended beyond what are considered normal terms for products in early stages of their life cycle. The Group is at risk to the extent that a customer may be unable to pay the debt on time, thus impacting working capital.	This risk is mitigated by strong ongoing customer relationships. Where possible, a full credit check of all new customers is carried out prior to trading. Payment terms are agreed depending upon credit assessment and review of credit history. For all customers with higher risk, payments in advance are requested. Overdue receivables are closely monitored and credit limits are managed rigorously. Credit insurance is in place to protect against payment default for most of the customers.	Possible **Low – no change**
15. Inventory obsolescence	Holding excess inventory levels when compared to demand leads to increased risk of obsolescence and write-off before consumption, and working capital restrictions.	There are appropriate stock holding policies, ensuring these are reviewed frequently and change dynamically in line with market/business conditions. Obsolete or slow moving stock items are identified and written-off monthly. Enforcing lead times for customer orders to ensure we have the most accurate forecast in place as far out as possible. Continually develop forecasting techniques so that stock requirements can be predicted with great accuracy. Ongoing supplier negotiation to reduce minimum order quantities to prevent obsolescence and inflated inventory.	Probable **High – no change**
16. Exchange rates	Global economic events and uncertainty may cause currencies to fluctuate and currency volatility contributes to variations in our sales of products and services in impacted jurisdictions.	There is a partial natural hedge for foreign currency movements, with sales companies and manufacturing spread across the globe. Cash flows are constantly reviewed and action is taken when appropriate. FX exposure is tracked monthly.	Probable **Medium – no change**
17. Fraud and Management Override	There is an inherent risk related to potential fraud within an organisation that management controls will be overridden by individuals.	There are key controls detailed in the Group's Revenue Cycle Management procedures to ensure that all controls are applied. Adherence is reviewed regularly and checked as part of the audit process.	Low **Medium – new**

Sustainable and responsible business

The Board believes that the effective management of the ESG agenda is integral to business success. The Group is not only compliant with all relevant regulations and legislation but has increasingly focused on enhancing the working environment for our employees and minimising the environmental impact of our manufacturing processes.

There is internal reporting of key metrics to ensure continuous improvement throughout the business, and each member of staff is expected to take individual responsibility for their contribution and to work together to achieve shared goals. Our digital technologies are being designed with the environment in mind – and are to be inherently more environmentally friendly and less impactful on the environment and natural resources than the analogue techniques we seek to replace. Our research shows that, compared to analogue alternatives, digital has a significant impact in reducing energy consumption (by as much as 55%), water consumption (by up to 60%) and CO2 emissions (by up to 95%), in addition to reducing pollution and waste materials.

The Group has again published a full ESG Report which is available on our website. This report contains full details of our ESG programme, including progress against the Company's Sustainability Roadmap to 2030 and the Rebaselining project with our new ESG Roadmap to 2050 and reports on the progress against each of our sustainability pillars, including our new Governance pillar. Consequently, the disclosure on ESG matters in this 2024 annual report has been reduced and will provide a higher-level summary of our ESG initiatives, in accordance with regulatory requirements.

Details on the Rebaselining project and the new ESG roadmap can be found in the ESG Report on our website.

Sustainability governance structure

Xaar benefits from a strong ESG governance structure. Our cross-functional ESG Committee has accountability to the Board. This group brings together a wide range of skill sets as well as a shared determination and passion for a more sustainable future. This team highlighted the need for Xaar to conduct a Rebaselining project which has resulted in us creating a new ESG Roadmap to replace our current Sustainability Roadmap. Developed by a cross-function team of 21 people from across different departments, the new roadmap consists of updated milestones, more realistic targets and a new Governance. Continuing to take a leading role in driving internal change and progress, to ensure we meet our ambitions by the time-line set by the UK Government and the Paris Agreement. The roadmap is available in the online Sustainability Report. Our Roadmap has five key pillars – Environment, People, Innovation, Community and Governance; its purpose is to drive our ESG goals beyond the traditional scope of Scope 3, Xaar is now enabling customers to reduce their Scope 3 emissions beyond Xaar's direct emissions. Our Roadmap provides an essential backbone for much of Xaar's future investment and activity. Xaar is committed to reducing its impact on the environment wherever possible. The CFO, Paul James, has specific Board responsibility for ESG matters. The Company has an ESG Committee which consists of senior management team representatives from operations, legal, HR, R&D, Communications and our specialist ESG advisors. It meets quarterly and makes twice yearly reports to the Board. The Directors are given monthly updates by the Chief Operating Officer on ESG initiatives and compliance.

Environment

The Group fully complies with local and national regulatory requirements in respect of the environment relating to the use, storage, handling and disposal of materials, chemicals, and waste products. Xaar maintains a Certified Environmental Management System in the UK that meets the requirements of ISO 14001:2015, helping us to manage our environmental aspects and impacts, which complements our commitment to continual improvement. It is readily available to view for interested parties. We carry out environmental management reviews and audit programmes designed to measure our progress in relation to our policy statement and objectives. Our ESG Roadmap has been evaluated against the UN's Sustainable Development Goals.

Xaar has identified opportunities and drive continual improvement in energy efficiencies. We have seen reductions in non-renewable energy usage and the related greenhouse gas emissions of the Company recorded in Scope 1 and 2 since 2015. The Greenhouse gas emissions statement is available on page 29.

All Group UK manufacturing locations are now supplied with certified carbon free electricity and moved over to a single green power contract in 2023. EPS, our US manufacturing site, is supplied with power generated from renewable sources. As part of our de-carbonisation programme, our UK pool car is electric and a salary sacrifice scheme is available for our employees to lease electric cars.

We now have chargers in place at UK sites. Xaar offsets its Scope 3 travel emissions, supporting certified carbon removal projects. In 2024, Xaar offset 650 tonnes of carbon through these schemes. To help mitigate the increase in energy prices, and to keep in line with ESOS requirements, Xaar is continuously looking at ways to reduce energy consumption. We are ESOS compliant and we have submitted our first ESOS action plan.

We have achieved our Zero waste to landfill target set on our previous roadmap going forward from 2025, we are now working with Biffa, and we have changed the internal bins to encourage further recycling and less waste to incineration. Megnajet is now under the same waste provider, Biffa so the UK is now zero waste to landfill. The Printhead Business Unit is certified zero waste to landfill by our waste treatment partners Veolia/Crawleys, with any non-recycled waste being sent to waste to energy recovery. In 2024, 34,284.47 kg of waste was diverted and 16,209.56 kg of waste was recycled (Printhead and FFEI businesses).

We recognise the relationship between biodiversity and the wellbeing and health of our colleagues. We are actively looking to support supporting and promoting local employee campaigns, starting with the introduction of beehives on site in Huntingdon, UK. We have produced our Xaar branded honey, which was sold to employees to raise over £500 for charity. None of our sites are located in or adjacent to protected areas.

Our operations are considered as low water usage, and we do not have any operations in any regions with high water stress. However, within our Huntingdon factory location we need to be cognisant of the risk of flooding in northern Cambridgeshire and the Fens, as well as the stress on the chalk streams and water aquifers in the southern Cambridgeshire. Xaar therefore considers water management throughout all activities of the Company and that water should be treated in a manner that will protect it for future generations. We regularly monitor and record water usage and utilise water efficient taps and cisterns. Xaar has a permit to discharge water issued by Anglian Water.

The effluent discharge is checked monthly by external consultants to ensure conformity to site discharge levels and content and reports show discharges are below permitted levels. There are no reported incidents in the last 12 months with regards to emissions to water.

We regularly monitor the air quality, temperature and relative humidity levels within the Huntingdon cleanroom facility. All cleanroom air supplies are fitted with HVAC filters. Xaar also remains conscious of the need for good indoor air quality, working hard to ensure adequate air circulation and routine maintenance of the systems. There are smoking areas located away from Huntingdon building entrances. Xaar has a permit issued by Huntingdon District Council due to the business using more than two tonnes of solvent for surface clean down each year. To comply with the permit any waste gases must not exceed total VOCs per room of 75mg/Nm3. This has been audited and confirmed via an external UKAS accredited company. There are no reported incidents in the last 12 months with regards to emissions to air. There are no significant air emissions in relation to NOx/SOx.

All substances handled and used by Xaar are in accordance with the CoSHH regulations and industry best practice, by risk assessment and evaluation in their usage, storage and disposal. Care is taken to look for any less harmful alternative substances where possible to minimise any potential impacts in their use beforehand.

People

The Group respects all human rights and regards those rights relating to non – discrimination, fair treatment and respect for privacy to be the most relevant and to have the greatest potential impact on its key stakeholder groups of customers, employees and suppliers. The Group undertakes extensive monitoring of the implementation of all of its policies and has not been made aware of any incident in which the organisation's activities have resulted in an abuse of human rights. Xaar is committed to only supplying products that contain conflict – free materials. Suppliers of parts containing tin, tantalum, tungsten or gold to Xaar are sent and required to complete an EICC-GeSI declaration providing evidence that parts supplied do not contain minerals sourced from areas of conflict – DRC or adjoining areas.

The Board has overall responsibility for ensuring that the Group upholds and promotes respect for human rights. The Group seeks to anticipate, prevent and mitigate any potential negative human rights impacts as well as enhance positive impacts through its policies and procedures, in particular, through its policies regarding employment, equality and diversity, treating customers fairly and information securely.

Printhead water usage	**2024**	2023
Freshwater usage (m^3)	**5,301**	5,184
Intensity ratio (m^3/£m turnover – excl. royalties)	**732**	73
Effluent and waste water (m^3)	**1,741**	1,741

UK health & safety incidents	**2024**	2023
RIDDORs*	**0**	0
Accidents	**11**	14
Incidents	**11**	35
Near misses	**12**	10

* Reporting of Injuries, Diseases and Dangerous Occurrences Regulations.

Group policies seek both to ensure that employees comply with the relevant legislation and regulations in place in the UK and other operating locations and to promote good practice.

The Group's policies are formulated and kept up to date by the relevant business area, authorised by the Board and communicated to all employees.

All new employees complete an induction process that outlines the expectations of the Company, its employees, customers and suppliers for the way in which business is conducted and helps to avoid situations that might lead to adverse legal issues or damage to our reputation.

The Group's most important corporate policies are incorporated into the Xaar Code of Conduct, and should be complied with at all times:

+ Anti-bribery and Corruption Policy
+ Confidential Information Policy
+ Corporate Criminal Offence Policy
+ Data Protection Policy
+ Employee Share Dealing Code
+ Email and Internet Policy
+ Gifts, Entertainment and Hospitality Policy
+ HS&E Policy Statements
+ Sanctions Policy
+ Whistleblowing Policy.

We have a Whistleblowing Policy that encourages open and honest communication where incidents of non-compliance are seen in our business. Whistleblowing issues are reported directly to management, and any significant issues, should they arise, are reported to the Audit Committee. In each instance, cases are investigated in detail and appropriate action taken. There was one whistleblowing incident reported in the year to a member of the senior management team. The report was investigated and reported to the Audit Committee. Action was taken to resolve the issue with the agreement of the Directors.

The Group is committed to acting ethically and with integrity in all our business dealings and relationships, implementing and enforcing effective systems and controls to ensure modern slavery in all its forms (including human trafficking, forced labour and child labour) is not taking place anywhere in our Group businesses or in any of our supply chains. The Group has published a Group-wide Modern Slavery Policy and a statement on the steps taken to prevent slavery, which is available on the Group's website.

Xaar has manufacturing sites in Huntingdon, Kettering and the USA, supported by R&D laboratories in Cambridge and Sweden, alongside head office functions in Cambridge, plus sales offices worldwide. It is always Xaar's intention to conduct business in a manner that protects the public, the environment, and employee safety. Xaar's Environmental and Health and Safety policies provide a framework for the setting and reviewing of Occupational Health, Safety and Environmental Objectives. This demonstrates Xaar's continued commitment to the prevention of injury and ill health and also the continual improvement in our Environmental and Occupational Health and Safety Performance. Xaar believes that the combination of a safe place of work and safe working practices, together with a productive and innovative environment, are critical to the continued success of the Company.

The Group undertakes R&D activities and manufactures products in the UK and the USA. The Group complies with all local and European legislation. The Group's manufacturing facility in Huntingdon is both ISO 9001:2015 and ISO 14001:2015 certified and as a minimum complies to HSG65. It is the Group's policy to maintain this level of certification for its Huntingdon manufacturing facilities and to comply at all times with all relevant environmental and other legislation in the territories in which the Group operates.

Sustainable and responsible business continued

People continued

The Group is compliant with REACH ('Registration, Evaluation, Authorisation and restriction of Chemicals'), WEEE ('Waste Electrical and Electronic Equipment') and RoHS ('Restriction of the Use of Certain Hazardous Substances') directives, as required under UK and European legislation. The Group has a proactive Health and Safety System modelled on OHSAS 18001/HSG65 in Cambridge, Huntingdon and Kettering.

The Group is committed to providing a working environment in which employees feel valued and respected and are able to contribute to the success of the business. Employees are expected to co-operate with the Group's efforts to ensure that the policy is fully implemented. The Group's aim is that its employees should be able to work in an environment free from discrimination, harassment and bullying, and that employees, job applicants, customers, retailers, business introducers and suppliers should be treated fairly regardless of:

+ race, colour, nationality (including citizenship), ethnic or national origins;
+ gender, gender reassignment, sexual orientation, marital or civil partnership status;
+ religious or political beliefs or affiliations;
+ disability, impairment or age;
+ real or suspected infection with HIV/AIDS;
+ membership of a trade union;
+ pregnancy, maternity and paternity;

and that they should not be disadvantaged by unjust or unfair conditions or requirements.

The Group aims to ensure that applications for employment from people with disabilities, and other under-represented groups, are given full and fair consideration and that such people are given the same training, development and job opportunities as other employees. Every effort is also made to retrain and support employees who suffer from disabilities during their employment, including the provision of flexible working to assist their re-entry into the workplace.

The Group places considerable value on the involvement of its employees and has continued to keep them informed of the various factors affecting the performance of the Group. This is achieved through written communications shared through the Company intranet and email, and formal and informal meetings. All employees participate in a bonus scheme based on both business line individual performance and Group business targets and, in the UK, all employee have the opportunity to participate in an HMRC approved Share Save Scheme.

The CEO pay gap ratio is set out on page 66 of the Directors' Remuneration report.

Employee gender analysis (excluding non-executive directors)	**2024 Male/Female**	2023 Male/Female
All employees	**256/75**	315/93
Executive Directors	**2/0**	2/0
Managers	**47/7**	39/16
Employees	**207/68**	274/77

Gender pay reporting is required for companies with over 250 employees. Xaar is reporting as Xaar plc, including all UK subsidiaries. The snapshot date for Xaar's data is 5 April 2024. At that point Xaar plc and its UK subsidiaries had 282 relevant employees: 217 male and 65 female. It is fundamentally important to understand that a gender pay gap does not necessarily mean men are paid more money for doing the same job. At Xaar we are committed to ensuring we pay based on merit not gender and we regularly monitor our pay awards to ensure that we pay the same rate for similar roles. Xaar's mean gender pay gap stands at 10.03% (2023: 14.19%). As with many companies we do have a gender pay gap, though our results are consistent with other companies who operate within the technical, manufacturing or engineering sector.

There has been an increase in female representation the middle lower quartile. This is a reflection of more female employees being promoted and appointed to senior roles. Improving our diversity will improve our results, and we will continue to work on improvements over the longer-term. A large part of Xaar's gender balance gap is due to the challenges of recruiting women into science and technology roles. We are continuing to work on increasing our gender balance in the following ways:

+ Xaar operates in a male dominated industry and we are working to ensure that our hiring managers are trained to understand and recognise gender bias. We do, however, receive significantly fewer applications from females for technical roles.
+ Our Talent Acquisition team assists hiring managers by giving practical advice, support and monitoring for gender bias. We seek to have both female and male candidates as part of the hiring pool whenever possible and we constantly review our processes to ensure we are encouraging more female applicants.
+ Xaar is supporting Cambridgeshire engineers of the future by sponsoring local schools' Imagineering Clubs, which is designed to introduce children to engineering and hopes to inspire young people to take up STEM subjects. A number of our women from Engineering participate in these endeavours.
+ We support all employees to achieve their potential with a talent management programme and we offer flexible working arrangements to support working parents.

The Group Personal Pension scheme is administered by Scottish Widows. The Company pension contribution for Directors (or cash allowance equivalent) does not exceed the contribution available to the majority of the workforce, currently 6% of base salary. The equity assets in the Pension Portfolio Funds largely track indices, which exclude certain stocks on environmental, social and governance (ESG) grounds.

The equity allocation of the Scottish Widows default pension portfolio is managed in partnership with State Street Global Advisors (SSgA) and BlackRock. A proportion of the equity allocation is currently invested in the climate transition fund developed with BlackRock and Scottish Widows has set targets by 2030 to halve the carbon footprint of their investments and 2050 to target net zero across all their investments. The equity funds are managed by State Street and BlackRock. The fixed interest fund by BlackRock and Aberdeen. Property, emerging market debt and climate transition fund by BlackRock. Schroders oversee the cash part of pre-retirement funds. The default investment has a lifestyling approach to manage risk as members approach their selected retirement age and the scheme offers investment flexibility and choice for employees.

Xaar provides a broad range of benefits which are relevant to each locality, these may include such items as individual medical cover, income protection and life assurance, Employee assistance programmes, wellbeing initiatives, health shield. Within the UK, there are a number of salary sacrifice schemes for Xaar employees including an electric vehicle scheme for employees to lease a new electric vehicle and a cycle to work scheme where employees can obtain finance and discounts on new bikes including electric options.

Employee health and wellbeing remains a keen priority for the Group. In line with this approach, the businesses within the Group have prioritised different initiatives that best reflect their workforce, such as volunteering and employee wellbeing policies, regular wellbeing initiatives weeks, qualified mental health first-aiders and other activities to encourage and promote a healthier workforce.

The Group has a training and development programme which offers a suite of Learning and Development tools to ensure key skills are developed and enhanced. An Apprenticeship Programme is embedded in the Group.

The Group operates an online performance management and appraisal system providing an opportunity for individual discussions on training needs and career planning. This is supported by a talent management and succession planning process from which the Executive Management Team assesses the outcomes, formulates action plans and reviews progress. The Board is kept informed of the results. The loss of key personnel is identified by the Board as a key risk and is set out in further detail in the principal risks and uncertainties table on page 17.

Voluntary labour turnover was 12.32% across the Group in 2024 (2023: 10.4%).

Innovation

Xaar recognises that innovation is key to achieving many of the sustainability goals across all five pillars that support our ESG Roadmap. For over 31 years, we've been reinventing inkjet and re imagining what's possible for printheads.

Our Product Lifecycle Management process has been adopted in all parts of the Xaar Group. It is used to develop new and innovative print-related products; which includes Design for Environment as part of the development considerations. Eco-design is the systematic application of environmental lifecycle considerations at the product design stage. The aim of eco-design is to avoid or minimise significant environmental impacts at all stages of the lifecycle of a product, from sourcing of raw materials and purchased components, design and manufacture, to distribution, use and end-of-life disposal. We are researching ways to use biodegradable structural parts in the manufacture of our products. An area of focus is to find an alternative, more sustainable material than Polylactic Acid (PLA) which is a biodegradable plastic used to print the majority of our jigs and fixtures.

The Company supports the precautionary principle by avoiding materials and production methods that pose environmental and health risks when suitable alternatives are available. Xaar continues to review changes in the Restriction of Hazardous Substances Directive (2011/65/EU). We are working hard to eliminate Substances of Very High Concern (SVHC) from the manufacturing process.

Our products and processes are designed in such a way that energy and raw materials are used efficiently, and waste and residual products are minimised over the product lifecycles. We have implemented a successful circular and resource efficient approach to the recovery of key electronic and piece parts from printheads that do not meet our high standards. This innovative approach, along with considerable sourcing efforts, has enabled us to continue production despite global shortages and has enhanced our business resilience.

The Company routinely audits, follows up and reports on its environmental performance, with particular emphasis on evaluating the potential risks of present and future products and operations. We issued a number of Technical Bulletins throughout the course of 2023, advising customers on product updates, system improvements and product end-of-life announcements. No product recalls were initiated in 2024.

Community

Xaar is proud to play an active role in the communities in which it operates. As part of our commitment to social value and community we have an active programme of sponsorship for projects and initiatives that are aligned to our business values. Full details of the community pillar updates are set in the Sustainability Report, available on the Company's website.

At a strategy and policy level, we published a Group Charity Policy. It helps us to define how we select and work with our charity partners. This is an important part of our ESG agenda. Xaar contributes annually to charitable causes through in accordance with this policy. In total, the Group made charitable contributions to local and national charities during the year totalling £18,280 (2023: £24,550).

We are now entering our final year with our three-year partnership with the East Anglian children's charity 'Break' to help change the lives of vulnerable young people on the edge of care, in care and leaving care (www.break-charity.org/charity/). We have managed to donate over £100,000 to Break during the course of our 3-year partnership (£50,280) through individual donations and fundraising, then Xaar have match funded this to bring us to over £100,000. Further details on our 3-year partnership and celebrations can be watched on the Company's YouTube channel, an in-house video to demonstrate our achievements.

As we come to the end of our 3-year partnership with Break, Xaar is launching their Hybrid Charity approach. After receiving employee feedback, there was strong support for some smaller local charity support, alongside our charity partnership. This commenced in March 2025. The Break partnership is being extended for one year. We will go forward with a new charity partner criteria and allow an opportunity to change our charity partner every two years.

Our senior leadership team recognises the benefit of volunteering to Xaar, our employees and to the wider community. Managed well, volunteering can raise our profile within the community and support our social responsibility plans. Xaar supports employees' voluntary work by providing 'holiday matching' of up to two and a half days a year. We believe this will help them get involved in their community, support employee mental health and wellbeing through positive activities and assist in developing new skills.

Political donations

The Company has a long-standing global policy against making contributions to political parties, political committees or candidates using Company resources (including monetary and in-kind services), even where permitted by law. No political donations were made in the current or previous year.

Taxation

We aim to manage our tax affairs in accordance with national legislative provisions and within the guidelines set down by the Organisation for Economic Cooperation and Development (OECD). Our objective is to structure our operations tax efficiently and take advantage of available incentives and exemptions provided by governments for eligible capital investments, R&D and similar expenditure. We do not enter into any artificial tax arrangements. We have not received any fines or penalties from any government tax agencies.

Task Force on Climate-related Financial Disclosures (TCFD)

In meeting the requirements of Listing Rule UKLR 6.6.6 R, the Board has concluded that:

We comply with the recommended disclosures across each of the provisions. See below for details.

<table>
<tr><th>Disclosures</th><th>Recommended disclosures</th><th>Response</th></tr>
<tr><td colspan="3">A. Governance</td></tr>
<tr>
<td>Disclose the organisation's governance around climate-related risks and opportunities.</td>
<td>1. Describe the board's oversight of climate-related risks and opportunities.
2. Describe management's role in assessing and managing climate – related risks and opportunities.</td>
<td>
The Xaar plc Board reviews key climate-related risks and opportunities and oversees mitigation strategies as part of the biannual review of principal and emerging risks.
Climate issues are considered when reviewing key things such as business strategy and risk management through the Environmental Management System (ISO 14001). Climate issues are also considered with the budget and performance objectives.
The below diagram details the updates to the Board including top level content.
ESG Updates to the Board
<table>
<tr><th>22 July 2024 – ESG Board update</th><th>18 December 2024 – ESG Re-baselining update</th><th>Monthly COO Board updates</th></tr>
<tr>
<td>+ ESG Approach
+ Carbon emissions by scope
+ Re-baselining recommendation
+ Environment pillar updates
+ People pillar updates
+ Innovation pillar updates
+ Community pillar updates
+ Compliance updates</td>
<td>+ Re-baselining process
+ Understand why and our current roadmap
+ How we are enabling our customers to reduce their emissions
+ Workshop results
+ Roadmap changes
+ New roadmap proposal
+ Approvals</td>
<td>+ Key pillar initiatives
+ Community pillar updates
+ Re-baselining updates
+ Approval process updates
+ Compliance updates</td>
</tr>
</table>
The Board
We have an ESG Committee which is accountable to the Board and reports on progress twice a year.
The ESG Committee meets on a quarterly basis to assess the risks & opportunities and proposals identified. A key function of this committee is to review progress against the roadmap, see (ESG Report) and to identify areas for future focus and projects.
Paul James CFO, has specific responsibility for ESG matters, including climate change and sustainability.
The ESG Committee members have specific roles within the committee, detailed below:
+ Julia Crane (Company Secretary) – Is responsible for the Governance Pillar
+ Pheobe Greenwood (Senior Legal Counsel) – Is responsible for ensuring compliance with applicable regulations
+ Graham Tweedale (COO) – Is responsible of the Environment Pillar
+ Karl Forbes (Group R&D Director) – Is responsible for the Innovation Pillar
+ Paul James (CFO}– Is responsible for the People Pillar
+ Greg Lockett (Operations Director) – Is responsible for the Community Pillar
+ Charlotte Baile (Head of Marketing) and our External PR company – Are responsible for ESG communications
+ Beth Connolly-Atkins (Strategy & Business Planning Manager) – Is responsible for leading the ESG strategy and the Committee.
ESG matters are also communicated to the wider Leadership Team once a month which gets cascaded through the teams. Alongside this, the Executive Team get quarterly updates, and a twice-yearly Management Review meeting takes place, informing on ESG matters related to ISO 14001.
</td>
</tr>
</table>

Disclosures	Recommended disclosures	Response
B. 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.	**3.** Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. **4.** Describe the impact of climate – related risks and opportunities on the organisation's businesses, strategy, and financial planning. **5.** Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Xaar considers and have targets against the baseline year 2019 to ensure Scope 1 and 2 Net zero by 2030(short term), a 45% in Scope 3 emissions by 2040 (medium term) and Scope 3 Net Zero by 2050 (long term). The disclosed risks do not pose a material impact to Xaar due to the risk levels and mitigations in place. These have all been determined using the scenario analysis via a study of the physical and transition risks and opportunities under TCFD. The report covered climate-related risks and opportunities over the short (<3 years), medium (3-10 years) and long term (>10 years). **Physical Risks** We completed climate scenario planning out to 2100 across two climate scenarios (e.g. RCP 2.6, RCP 8.5). The review examined all Xaar sites globally and our top ten critical supplier sites using 12 separate climate models, in each case the RCP 8.5 model was used to assess risks at the most extreme expected temperature rises (4.5°C). The report concluded that physical risks are low to very low in almost all cases. There are two Xaar sites at risk of flooding: + Bayes Street Kettering – surface water high risk + Fuzhou Avenue, Bao'an District Shenzhen – one metre above sea level There are three supplier sites of ten analysed with risks: + Site 1 IPRO PID five metres above sea level near coast + Site 4 Fabrinet five metres above sea level protected by Bangkok (7km inland) + Site 5 CTS Tianjin China 0 metres above sea level near coast Only one Xaar site had a Short term physical flood risk, which was from surface water flooding according to the Environment Agency. The site is a low impact site used for local storage, it is on top of a hill, and the Environment Agency risk map does not correspond to local observation at times of high rain fall. One Xaar site has a Medium to Long term physical risk at 1 meter above sea level. It is in a major city which is likely to have sea level defences in the case of sea level rise. One Xaar supplier has a Medium to Long term physical risk at 0 meters above sea level. It is in a major port which is likely to have sea level defences in the case of sea level rise. Xaar is monitoring the supplier and their mitigation plans. Two Xaar suppliers are 5 meters above sea level. There is no current risk to these sites, but we will continue to monitor as conditions change. Only one Xaar or supplier site had any fire risk, and this site was low risk according to the local government fire risk assessment. This may become a long-term physical risk depending on temperature rise and will continue to be monitored. The site is protected from the local forests by highways on both sides and a significant separation from the forest edge which is on the other side of the highways. There have been other physical risks identified as below: **Drought** – Changes in precipitation is an expected consequence of climate change. **Wind** – Weather patterns are changing with increased risk of wind. **Heat** – High temperatures result in rail networks, data centres and other infrastructure failing catastrophically above their design point. **Mitigations** China is expected to create one metre coastal defences to protect its major population centres and both the Xaar and CTS sites are part of major population centres and should be part of these coastal actions. IPRO PID at five metres will not be affected for a long time, so there is plenty of time to monitor actual sea level rise before making any risk judgement. Fabrinet at five metres, and 70km inland will not be affected for a long time, so there is plenty of time to monitor actual sea level rise before making any risk judgement. We expect coastal defences to be put in place to protect Bangkok which will also protect Fabrinet.

Task Force on Climate-related Financial Disclosures (TCFD) continued

Disclosures	Recommended disclosures	Response
B. Strategy continued		
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.	**3.** Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. **4.** Describe the impact of climate – related risks and opportunities on the organisation's businesses, strategy, and financial planning. **5.** Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	see below

Transition Risks

Carbon pricing – Includes carbon taxes and voluntary removal or offset costs. Tightening regional or national regulations as well as climate commitments across individual businesses.

Sourcing transparency and product labelling regulations – This could increase significantly through pressure from regulators, consumers, and investors. This could lead to disclosure compliance risks and rising commodity costs linked to radical transition to transparent supply chains.

Opportunities

Supply chain efficiency – 99% of our costs for goods and services are in non-energy purchases. Improvements in our supply chain efficiency as we drive for Net Zero by 2050 for Scope 1, 2 and 3 will pass through as cost reductions.

Local energy generation – Our sites and supply chain can all generate energy locally at lower cost than current energy prices, as this cascades down our supply chain it will reduce our suppliers' costs.

First mover advantage – Having a target of Net Zero by 2050 for Scope 1, 2 and 3 protects Xaar from the main risks associated with climate change at the same time as maximising the opportunities from supply chain cost deflation along with increasing customer demand for Net Zero products.

In managing these financial climate-related risks our business model would not require material change, except for increasing inventory levels of components to account for transport delays arising from exceptional weather events, and to consider mitigation for potential business disruption, e.g. flood defences.

Having calculated our Supply Chain and other Scope 3 emissions along with our Scope 1 and 2 energy emissions. We then applied multiple carbon prices for the period from 2022 to 2052. These were combined with a do-nothing de carbonisation plan.

This provides a quantification of the impact should we make no attempt at carbon reduction along with the opportunity in terms of future cost avoidance from our Net Zero by 2050 for Scope 1, 2 and 3 goal.

	Potential impact if no action taken			
Risk/opportunity	2030	2040	2050	Assumptions
Carbon pricing	£1.3m @ $100 per tonne £0.6-6.4m range	£0.9m @ $100 per tonne £0.4-4.5m range	£1.3m @ $100 per tonne £0.3-3.2m range	Prices from $50 to $500 per tonne of CO_2e

The above scenarios are based on a general de carbonisation rate of 3.5% per year from 2022 to 2052.

The financial impacts are relatively low due to the supply chain risk exposure matrix summarised a minimal risk for our supply chain. The flood risks pose a low risk to physical damage to assets to both Xaar buildings and our suppliers other than those disclosed with mitigations in place.

Climate-related issues serve as an input into financial planning when looking at energy saving investments, capex and improvements in processes on a yearly review basis against milestones set on the ESG Roadmap to 2050. These inputs are prioritised by the ESG roadmap and the risk matrix managed by the Environmental Management Team.

Opportunities exist in the transition to a low carbon manufacturer, by reducing both energy usage and utilising renewable energy sources to deliver lower costs to the business. Product development will incorporate sustainability as a central objective, to transition manufacturing from a linear to a circular process and to being a process to reduce, reuse and recycle materials, all to be undertaken as part of Xaar's ESG Roadmap.

Disclosures	Recommended disclosures	Response
B. Strategy continued		
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.	**3.** Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. **4.** Describe the impact of climate – related risks and opportunities on the organisation's businesses, strategy, and financial planning. **5.** Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	We have undertaken a high-level review of the likely impact of 2°C and 4.5°C global warming scenarios (see section 3 above), an independent external climate related scenario review in 2022 to identify physical and transition risks and opportunities in delivering carbon neutral manufacturing. The review identified very low to low risks in most cases with five sites identified with slightly higher risk scenarios. The Company is resilient to these scenarios to some extent, we have an ESG roadmap to ensure that the company reduces their environmental impact over time. The ESG Roadmap, which is the main strategy for climate related issues, considers the risks and opportunities detailed in the aspects and impacts register along with the principal risk register. There is nothing to report on in relation to financial performance,
C. Risk Management		
Disclose how the organisation identifies, assesses, and manages climate-related risks.	**6.** Describe the organisation's processes for identifying and assessing climate-related risks. **7.** Describe the organisation's processes for managing climate-related risks. **8.** Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	The Group has processes in place for identifying, evaluating and managing the principal risks, which could have an impact upon the Group's financial performance. Climate change has been disclosed as an emerging risk in recent years and has been escalated to a principal risk category in 2021 and updated in 2024. As detailed in the statement below, the risks are determined via a prioritisation process which also considers new regulations, upcoming issues and compliance requirements. This is updated and managed during the Environmental Management Team meetings which happen monthly and is managed via the ISO 14001 Environmental Management System. See above – A. Governance – Xaar has a governance structure to identify climate-related risks to be reported to the Board biannually including making decisions to mitigate, transfer, accept, or control those risks. In line with ISO14001 Xaar reviews the risks and opportunities along with the aspects and impacts register. The Environmental Management Team meet monthly to review any updates or changes to these. The risks are given a severity rating by using the HS&E Procedure – Environmental Aspects and Impacts risk scale. This scale looks at the 'harm' risk the 'benefit risk', the probability and our preparedness. This then gives us a significance score which thus determines our priorities, the highest risk factors as determined by the scale and scoring gives us the top priorities. This process is managed by the Quality Systems Manager. As part of the Group's risk management, within the detailed risk register, climate-related risks are determined alongside other principal risk areas, e.g. manufacturing facility, inventory and supply chain risks. The assessment is quantified via a Likelihood/Magnitude matrix to determine the overall net risk after mitigation. This is reviewed in the Environmental Management team as part of the monthly reviews and within the ISO 14001 certification audits.
D. Metrics and Targets		
Disclose the metrics and targets used to assess and manage relevant climate – related risks and opportunities where such information is material.	**9.** Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. **10.** Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. **11.** Describe the targets used by the organisation to manage climate – related risks and opportunities and performance against targets.	Xaar currently uses a few different metrics to measure our environment impact and performance. The overall measures are the GHG emissions for Scope 1, 2 and 3. As a company we also measure and report on the following: + Energy usage (kWh) + Gas usage (kWh) + Water usage (m^3) + Waste – recycled and diverted from landfill for all waste streams including hazardous (tonnes) + Stack emissions (m^3) + Refrigerant gas leaks (CO_2 tonnes) + Business travel (CO_2 tonnes) These metrics are key drivers on the ESG report under the environment pillar and ISO 14001 requirements. Reviews take place in the Environmental Management meeting and the ESG Committee meetings.

Task Force on Climate-related Financial Disclosures (TCFD) continued

Disclosures	Recommended disclosures	Response
D. Metrics and Targets continued		
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.	**9.** Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. **10.** Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. **11.** Describe the targets used by the organisation to manage climate – related risks and opportunities and performance against targets.	GHG emissions are disclosed as per the SECR requirements for Scope 1 and Scope 2. An initial assessment has been completed for Printhead business unit Scope 3 emissions, and a boundary developed. As a global business, we recognise the impact that our employee travel requirements have on our Scope 3 emissions. To mitigate this, we are currently offsetting all travel-related activities, using hybrid and/or electric vehicles as hire cars where possible and working towards a Group travel policy. We understand that our upstream and downstream Scope 3 emissions are much greater than our Scope 3 employee travel emissions. A key undertaking in 2024 was to calculate our full Group Scope 3 emissions, backdated to our 2019 baseline. Good progress has been made regarding this, and we now have clearer data for Scope 3, but there is still some more work to be done to complete this and to get the data verified. Moving forward, we aim to capture and report upstream and downstream Scope 3 data. Xaar has 3 main targets for ESG which are intensity based with a baseline year of 2019. We have made progress against these which can be seen in the GHG disclosures. + Scope 1 and Scope 2 net zero emissions by 2030 + Scope 3 45% reduction by 2040 + Scope 3 Net Zero by 2050 We measure and report on the following emissions within each scope: + Scope 1 – Gas usage and refrigerant leaks + Scope 2 – Electricity + Scope 3 – Employee commuting and business travel. As detailed above, Xaar are moving forward to start measuring further Scope 3 emissions such as distribution and transportation, use of sold products and purchased goods and services. Further specific targets are also being worked on as we start to create individual glide paths for the pillars on the ESG Roadmap (Environment, People, Community, Innovation and Governance) which will detail how we reduce our emissions. For example, there will be specific targets on water reduction projects, energy reduction projects and waste reduction projects.

Assessment parameters	
Baseline year	1 January 2013 to 31 December 2013
Consolidated approach	Operational control
Boundary summary	All entities and all facilities under operational control included subject to the materiality threshold applied
Consistency with the financial statements	The only variation is that leased properties deemed to be under operational control have been included in Scope 1 and 2 emissions
Materiality threshold	Materiality has been set at Group level at 5%*
Assessment methodology	Greenhouse Gas Protocol and ISO 14064-1 (2018)
Intensity ratio	Emissions per £'000 turnover excluding royalties

* The total of any excluded emission sources is estimated to be less than 5% of Xaar plc's total reported emissions.

Greenhouse Gas Emissions statement

Xaar plc has calculated its global greenhouse gas (GHG) emissions statement using an operational control consolidation approach

Scope 1 emissions

Scope 1 emissions occur from sources that are owned or where Xaar plc has operational control of a facility. This includes direct emissions from gas combustion in our buildings, fuel used in leased company vehicles and impacts from refrigerant leaks.

Actual and estimated gas consumption data has been collected from each of the leased properties under the control of the Xaar Group, from data sources including direct meter readings, meter readings from suppliers included on invoices and estimations where required based on available information from property management suppliers and other sources. The company vehicle fleet is now fully electric.

Scope 2 emissions

Scope 2 refers to indirect emissions from the consumption of purchased electricity (also including any purchased heat, steam, or cooling) from facilities owned or under the operational control of Xaar plc. Actual and estimated data has been collected from each of the leased properties under the control of the Xaar Group, from data sources including direct meter readings, meter readings from suppliers included on invoices and estimations where required based on available information from property management suppliers and other sources.

The Company's vehicle fleet is fully electric.

Scope 3 emissions

Scope 3 emissions are all indirect emissions – not included in Scope 2 – that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Scope 3 CO_2 emissions currently represent calculated and estimated CO_2 emissions from travel, WFH and employee commuting. As part of our roadmap commitment, we are offsetting our travel, WFH and employee commuting emissions, this equates to 649.4 tCO_2 being offset through verified programs. As the Group's ESG Roadmap progresses, we aim to collaborate with the supply chain to validate our upstream model data and reduce CO_2 emissions. We will continue to disclose ongoing progress in our ESG Report. Activities on downstream Scope 3 have been initiated, and we aim to understand and report on these in the future when we have the full data set and will continue to drive reductions across our full Scope 3 CO_2 emissions.

Greenhouse gas emissions		**Renewable**	**Non-renewable**	**2024 Total**	Renewable	Non-renewable	2023 Total
Global energy use	kWh	**7,465,745**	7,435	7,473,180	8,428,119	181,006	8,609,125
	%	**99.9%**	0.1%		97.9%	2.1%	
UK	kWh	**7,103,847**	0	7,103,847	8,102,416	171,456	8,273,872
Non-UK	kWh	**361,898**	7,435	369,333	325,703	9,550	335,253
Absolute values							
Scope 1	tCO_2e	**–**	192	192	–	169	169
Scope 2	tCO_2e	**–**	0.9	0.9	–	26	26
Scope 3	tCO_2e	**–**	0	0	–	166	166
Total	tCO_2e	**–**	192.9	192.9	–	361	361
– Scope 1 & 2 emissions of which	UK tCO2e	**–**	122.7	122.7	–	122	122
Normalised values							
Scope 1	tCO_2e/£'000	**–**	308.7	308.7	–	239	239
Scope 2	tCO_2e/£'000	**–**	1.5	1.5	–	37	37
Scope 3	tCO_2e/£'000	**–**	0	0	–	234	234
Total	tCO_2e/£'000	**–**	310.2	310.2	–	510	510

* UK energy certified by Bryt, by Guarantees of Origin from renewable sources. US energy (Green Mountain) 100% carbon free, 68% renewable (balance being nuclear). Significant site-based emissions improvements since 2022 including the Cleanroom Efficiency Shutdown project which decreased the Huntingdon site energy use. The Dallas site (carbon impact of 69 tCO_2e in 2022) was sold in 2023 contributing to the decrease in non-UK non-renewable energy use. Figures show a reduction in Scope 3 emissions due to our commitment to offsetting all PHBU & MegnaJet travel (485 tCO_2e). Our figures include a total of 3.43 tCO_2e from refrigerant leaks in Scope 1 across the Group.

Historic greenhouse gas emissions	2022	2021	2020	2019	2018	2017	2016
Scope 1 – tCO_2e	220	177	75.0	108.3	124.8	147.7	167.0
Scope 2 – tCO_2e	21	116	1,741.0	2,622.8	3,128.1	4,088.0	4,432.0
Total – tCO_2e	241	293	1,816.0	2,731.1	3,252.9	4,235.7	4,599.0

Non-financial information statement

This Annual Report contains the information required to comply with the Companies, Partnerships and Groups (and Non-Financial Reporting) Regulations 2016, as contained in sections 414CA and 414CB of the Companies Act 2006. The table below provides key references to information that, taken together, comprises the Non-Financial Information Statement for 2024*.

Reporting requirement	Group policies that guide our approach	Information and risk management, with page references
Environmental matters	+ Environmental Policy Statement + Environmental Sustainability statement + Health & Safety Policy statement + Quality Policy statement.	→ **Risk management & principal risks, pages 13 to 19** → **Sustainable and responsible business, pages 20 to 23** → **Section 172 statement, pages, pages 44 to 45** → **Company Purpose, contents page** → **Our business model, page 2**
Employees	+ Absence Policy + Alcohol & Substance Abuse + Annual Leave Policy + Bullying & Harassment Policy + Capability Policy + Code of Conduct + Disciplinary Policy + Equal Opportunities Policy + Family Leave Policy + Flexible Working Policy + Gender pay gap report Policy + Gifts & Entertainment Policy + Grievance Policy + Health & Safety Policy + Performance Planning Policy + Referral & Reward Policy + Retirement Policy + Whistleblowing Policy + Working time regulations	→ **Risk management & principal risks, pages 13 to 19** → **Sustainable and Responsible business, pages 20 to 23** → **Section 172 statement, pages 44 to 45** → **Company Purpose, contents page** → **Our business model, page 2**
IT, cyber security & data protection	+ Confidential Information Policy + Data Protection Policy + Email and Internet Policy + Mobile Phone Policy.	→ **Risk management & principal risks, pages 13 to 19**
Social matters	+ Human Rights Policy + Charitable Donations Policy + Employee Volunteering Policy.	→ **Sustainable and responsible business, pages 20 to 23**
Respect for human rights	+ Human Rights Policy + Sanctions Policy + Modern Slavery Policy + Modern Slavery Act Compliance Statement.	→ **Risk management & principal risks, pages 14 to 19** → **Sustainable and responsible business, pages 20 to 23** → **Section 172 statement, pages 44 to 45** → **Company Purpose, contents page**

Reporting requirement	Group policies that guide our approach	Information and risk management, with page references
Anti-corruption and anti-bribery matters	+ Anti-Bribery & Corruption Policy + Gifts & Entertainment Policy + Anti-money Laundering Policy + Whistleblowing Policy. + Conflict Materials Policy + Corporate Criminal Offence Policy + Employee Share Dealing code	→ Risk management & principal risks pages 13 to 19 → Sustainable and responsible business, pages 20 to 23 → Our business model, page 2 → Section 172 statement, pages 44 to 45 → Company Purpose, contents page
Description of the business model		→ Our business model, page 2
Description of the principal risks in relation to the above matters, including business relationships, products and services likely to affect those areas of risk, and how the Company manages the risks		→ Risk management & principal risks, pages 13 to 19 → Sustainable and responsible business, pages 20 to 23 → Climate change, page 16
Non-financial key performance indicators		→ Sustainable and responsible business, pages 20 to 23 → Greenhouse gas report, page 29 → Key Performance Indicators, pages 11 to 12

* The policies listed above are available to employees via our intranet, alongside corporate policies being available on our website. Compliance with our policies is monitored through the implementation of annual compliance statements, through our internal audit function, and locally by our General Managers.

Board approval of the Strategic and Annual Reports

The section 172 statement forms part of this Strategic Report – please see pages 5 to 33.

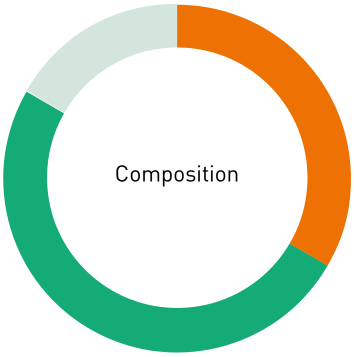
The Strategic Report, Annual Report and Financial Statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's position, performance, business model and strategy.

The Strategic Report was approved by the Board on 24 March 2025 and is signed on its behalf by:

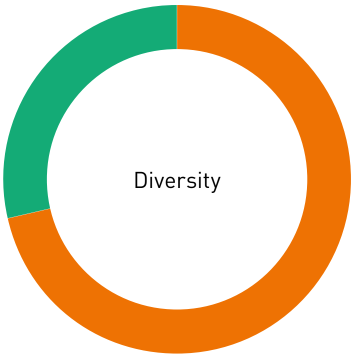
Andrew Herbert
Chairman

Governance at a glance

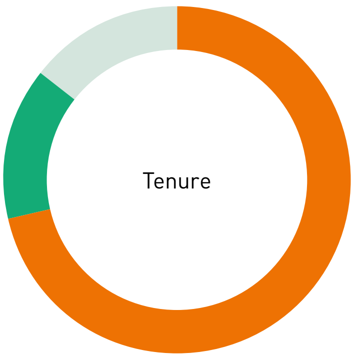
Board composition



Executive Director	2
Non-Executive Director	4
Chair	1



Male	5
Female	2



0–3 years	5
3–6 years	1
6–9 years	1

Governance framework

Board of Directors

The Board's responsibility for leading the Group towards achievement of its purpose is supported by a robust governance framework.

The Board has established a corporate governance structure with clearly defined responsibilities, designed to safeguard and enhance the long-term sustainable success of Xaar, creating value and benefit for its shareholders and other stakeholders.

Biographies

→ Read more about our Board on page 35

Corporate Governance

→ Read more about Corporate Governance on pages 46 to 51

The Board delegates certain matters to its principal Committees

Audit Committee

The Audit Committee is responsible for monitoring and reviewing the integrity of the financial reporting process, including the appropriateness and effectiveness of the Internal Controls and Risk Management procedures of the Group.

Richard Amos Chair
Appointed 1 June 2023

→ Read more on page 52

Nomination Committee

The Nomination Committee is responsible for reviewing the size, structure and composition of the Board and providing advice to the Board on Board and senior management appointments and succession planning, monitoring of the composition of the Board and its Committees.

Andrew Herbert Chair
Appointed 1 April 2020

→ Read more on page 55

Remuneration Committee

The Remuneration Committee is responsible for the development and implementation of the Group's remuneration framework and policies for Directors including all incentives and bonuses.

Inken Braunschmidt Chair
Appointed 1 July 2024

→ Read more on page 57

Division of responsibilities

Director	Responsibilities
Andrew Herbert Chairman	+ Primary responsibility is to lead the Board to ensure the Board functions properly to meet its obligations and responsibilities, by facilitating efficient Board discussion, challenge and debate. + Chair of the Nomination Committee.
John Mills Chief Executive Officer	+ Leads the Executive Committee responsible for proposing and implementing Group strategy, and managing the operational and financial performance of the Group. + Engages with various stakeholders of the Group, providing feedback to the Board.
Paul James Chief Financial Officer	+ Evaluates the financial performance of the business in line with strategy implementation, operational objectives, forecasts and budgets. + Ensures integrity of reported financial information, and maintaining robust accounting systems and internal controls.
Inken Braunschmidt **Jacqueline Sutton** **Stuart Widdowson**	+ Non-Executive Directors provide constructive challenge and strategic guidance to the Board, monitor achievement of objectives and Executive Director performance. + Inken Braunschmidt is Chair of the Remuneration Committee.
Richard Amos Senior Independent Director	+ As the Senior Independent Director, acts as a sounding board for the Chairman and an intermediary for other Directors, and is available to discuss any concerns with shareholders that cannot be resolved through communication with the Chairman or Executive Directors. + Chair of the Audit Committee.

Highlights

Key governance activities

During 2024, the Board undertook the following key governance activities:

+ Recruitment of two new Non-Executive Directors, including the Chairman of the Remuneration Committee
+ Appointment of a new Chief Financial Officer
+ Ensured compliance with the UK Corporate Governance Code 2018
+ Conducted an internal review of Board and Committee effectiveness and performance

→ Read more on pages 46 to 51

Board focus areas

During 2024, the Board focused on the following key operational and strategic activities:

+ Capital, equity and business strategy
+ Board succession
+ Review of the Group's ESG activities
+ Regular monitoring of cyber security
+ Investor and customer engagement
+ Cost control measures
+ Operational improvements.

Board meeting attendance

The Board held 11 scheduled Board meetings in 2024, with two additional unscheduled meeting held to cover specific items.

Chairman, Non-Executive and Independent Directors	Scheduled Board meetings attended	Additional Board meetings attended
Andrew Herbert Chairman	**100%**	**100%**
Richard Amos Senior Independent Director & Independent Non-Executive Director	**100%**	**100%**
Inken Braunschmidt Independent Non-Executive Director (appointed 1 June 2024)	**84%**	**50%**
Alison Littley Independent Non-Executive Director (resigned 30 June 2024)	**100%**	**100%**
Jacqueline Sutton Independent Non-Executive Director	**100%**	**50%**
Stuart Widdowson Non-Executive Director (appointed 27 February 2024)	**100%**	**100%**
Executive Directors		
John Mills Chief Executive Officer	**100%**	**100%**
Paul James Chief Financial Officer (appointed 20 November 2024)	**100%**	**N/A**
Ian Tichias Former Chief Financial Officer (resigned 20 November 2024)	**100%**	**100%**

Chairman's introduction to Governance

A strong governance framework with robust supporting processes across Xaar is a key factor in delivering sustainable business performance, generating value for shareholders and contributing to wider society.

Dear Shareholder

I am pleased to introduce this year's Corporate Governance report for the financial year ended 31 December 2024.

The Board recognises the way that the Company does business is as important as what it does. A strong governance framework with robust supporting processes across Xaar is a key factor in delivering sustainable business performance, generating value for shareholders and contributing to wider society.

A key part of the Board's role is to provide entrepreneurial leadership, with appropriate oversight, challenge and support to the management team.

Board focus and oversight

Key areas of the Board's focus during the year included financial stability, investment in product development, the upgrade to our

Huntingdon manufacturing site, recruitment of new Non-Executive Directors, and sustainability initiatives.

UK Corporate Governance Code 2018 and s.172 reporting

Our report demonstrates the way that we have applied the principles and complied with the provisions of the UK Corporate Governance Code 2018 during the year and our approach to governance in practice. Our Code compliance statement can be found on pages 46 to 51. Further details on the way that our Directors discharged their duties under s.172 of the Companies Act are set out on pages 44 to 45.

Board composition

Succession planning is an important part of our governance processes. Furthermore, as our strategy evolves, so do the skills and experience required for the Board to help drive the execution of Xaar's strategy. Further details of the work undertaken by the Nomination Committee during 2024 on succession planning are on pages 55 to 56.

Inken Braunschmidt joined the Board on 1 June 2024 as a Non-Executive Director to replace Alison Littley who stepped down on 1 July 2024 as Chair of the Remuneration Committee. Richard Amos replaced Alison Littley as Senior Independent Director on 1 July 2024. Ian Tichias stepped down from the Board on 20 November 2024. Paul James was appointed as an Executive Director and Interim Chief Financial Officer on 20 November 2024. Paul was appointed as the permanent CFO on 15 January 2025.

More information on the search process is set out in the report of the Nomination Committee on pages 55 to 56.

I will reach my ninth anniversary as a director on 1 June 2025. The search for my successor as Chairman and Non-Executive Director has been started by the Board, under the direction of Richard Amos, the Senior Independent Director. I propose to remain on the Board for a short period until the handover to my successor is completed.

Board effectiveness review

An internal evaluation of the Board was undertaken in December 2024. The findings of the review and our progress against the actions from 2023 can be found on pages 48 to 51.

Stakeholder engagement and support building strong working relationships with our stakeholders is critical to our success and the development of our strategy and is intrinsic in our day to day activities. Further details of how we engage with stakeholders are set out on page 44 to 45.

Business conduct

Xaar aspires to the highest standards of conduct. The Code of Conduct is applied throughout the Company and helps to ensure that good governance extends beyond the Boardroom. This Code, which works alongside our values, relates to the Company's policies and procedures, which outline the responsibilities of our employees and Xaar as an employer. These policies have been devised to protect our employees and stakeholders, as well as the business interests of Xaar, to ensure that we maintain high standards both legally and ethically. The Board receives relevant updates on how the application of the Group's culture and values are embedded for colleagues and the Group's wider stakeholders. More details are set on pages 44 to 45.

Engagement with shareholders

We believe that communication with our shareholders is key. In addition to the comprehensive programme of investor relations led by John Mills and Paul James,

I pro-actively seek periodic engagement with institutional investors. Both Richard Amos, the Senior Independent Director, and I are available to meet with shareholders as appropriate.

Our AGM also provides an important opportunity to meet with and answer questions from shareholders.

On behalf of the Board, I would like to thank all of our shareholders and stakeholders for their continued support of the Company.

Andrew Herbert
Chairman

24 March 2025

Biographies

→ **Read more about the Board on page 35**

Corporate Governance

→ **Read more about Corporate Governance on pages 46 to 51**

Board of Directors

Committee Key
- ● Chair
- ○ Member
- A Audit Committee
- N Nomination Committee
- R Remuneration Committee

Andrew Herbert
Chairman
Appointed to the Board: 2016
N (Chair) R

Qualifications
+ FCMA Chartered Management Accountant
+ BA (Hons) in Business Studies.

Skills and experience
+ Extensive experience in the global digital printing industry following a 30-year career with Domino Printing Sciences plc, working both in the UK and the US
+ Group Finance Director/ Chief Financial Officer of Domino Printing Sciences plc from 1998 to 2015 during which time he played an instrumental role in expanding the business geographically through acquisition and creation of sales channels, and in broadening the product range via acquisition of technology based businesses
+ Previously held a number of line director roles in Finance, Operations, Planning and Business Development

External appointments
+ Non-executive Chairman and Director of Midwich Group

Richard Amos
Senior Independent Director
Appointed to the Board: 2023
A (Chair) N R

Qualifications
+ ACA Institute of Chartered Accountants in England & Wales
+ MA in Engineering.

Skills and experience
+ Has over 30 years' experience, having started his career at EY in 1988
+ From 2000 to 2020, was an executive on the boards of five companies listed on the London Stock Exchange
+ Most recently as Chief Financial Officer of Wilmington plc, Chief Financial Officer of Plant Impact plc and Group Finance Director of Anite plc.

External appointments
+ Non-Executive Director at Thruvision Group plc, where he serves as the Senior Independent Director, Chair of the Audit and Nomination Committees and is a member of the of the Remuneration Committee
+ The Non-Executive Chairman of Skillcast Group plc where he also serves as a member of the Audit and Remuneration Committees.

John Mills
Chief Executive Officer
Appointed to the Board: 2019

Qualifications
+ PhD Physics.

Skills and experience
+ Five years as CEO at Inca Digital
+ Previously CEO at DataLase and COO at Plastic Logic
+ Wealth of experience in inkjet, having started career at Domino Printing Sciences as Development Scientist rising to Director of Development after four years in various technical roles.

External appointments
+ None.

Paul James
Chief Financial Officer
Appointed to the Board: 2024

Qualifications
+ FCA Institute of Chartered Accountants in England & Wales
+ MBA (Edinburgh University)
+ BSc (Hons) Engineering (Edinburgh University).

Skills and experience
+ Group CFO of Biffa from September 2023 until October 2024 and Group CFO of Genuit Group plc from March 2018 to September 2023
+ Held senior financial roles with Dixons Carphone plc, Inchcape plc, British American Tobacco plc and Ernst and Young
+ Proven track record of delivering business focused finance operations that drive efficiency and commercial performance beyond finance.

External appointments
+ None

Inken Braunschmidt
Non-Executive Director
Appointed to the Board: 2024
A N R (Chair)

Qualifications
+ BA (Hons) and Masters – Business Administration, Innovation & Technology Management
+ PhD – Technology Management

Skills and experience
+ Chief Innovation and Digital Officer and member of the Executive Board of Halma plc until 2023
+ Spent 13 years at RWE AG, subsidiary innogy SE, where she held various international leadership roles focusing on strategy, innovation, digital transformation and change management.

External appointments
+ Non-executive Director of James Fisher and Sons plc and TT Electronics plc
+ Member of the Digital Programme Board of the Royal Academy of Engineering.

Jacqueline Sutton MBE
Non-Executive Director
Appointed to the Board: 2023
A N R

Qualifications
+ BA (Hons) Russian and German
+ Postgraduate Diploma in International Marketing.

Skills and experience
+ From 2008 to 2021, had several senior leadership roles in Rolls-Royce plc's largest division (Civil Aerospace).
+ Most recently, Jacqueline was Chief Customer Officer of Civil Aerospace, Rolls-Royce Group
+ Prior to joining Rolls-Royce, Jacqueline held senior management roles with GE Aviation Systems (formerly Smiths Aerospace).

External appointments
+ Non-executive director of Farnborough International and the Women in Aviation & Aerospace Charter
+ Senior Adviser to Newton Europe
+ Trustee of the Council of St John's College, Durham University.

Stuart Widdowson
Non-Executive Director
Appointed to the Board: 2024

Qualifications
+ BA (Hons) Business Economics
+ Investment Management Certificate.

Skills and experience
+ Managing Partner of Odyssean Capital, which he founded in 2017
+ Prior to founding Odyssean he was a Director and fund manager at GVQ Investment Management. In 2009, he became lead fund manager of Strategic Equity Capital plc
+ From 2009 until 2017, Stuart was the lead fund manager of Strategic Equity Capital plc
+ Stuart began his career as a strategy consultant undertaking commercial due diligence and strategy projects for private equity and corporate clients, before working for HgCapital, a leading private equity investor.

External appointments
+ Managing Partner of Odyssean Capital LLP.

Directors’ report
Report on the affairs of the Group

The Directors present their Annual Report together with the financial statements for the year ended 31 December 2024.

The Company has chosen, in accordance with section 414C(11) of the Companies Act 2006, to include matters of strategic importance in the Strategic Report which otherwise would be required to be disclosed in the Directors’ report. An indication of likely future developments in the business of the Company and details of research and development activities and important events since the financial year-end are included in the Strategic Report. The following cross-referenced material is incorporated into this Directors’ report.

Non-financial information statement – Subject Matter	Section/Page
Principal risks and uncertainties	Risk management on pages 13 to 19
Business model	Strategic Report on pages 2 to 31
Employee engagement	Strategic Report on page 22 Stakeholder engagement on pages 44 to 45 Directors’ Remuneration report on pages 57 to 58
Equality, diversity, inclusion and human rights	Sustainable and responsible business on pages 20 to 23
Disabled employees	Sustainable and responsible business on page 22
Supplier engagement	Stakeholder engagement on page 45
Engagement with customers and other business relationships (including community engagement)	Stakeholder engagement on page 45 Sustainable and responsible business on page 23
Greenhouse gas emissions and environmental policies	Sustainable and responsible business (TCFD) on pages 20 to 28 GHG statement on page 29
Political donations	Sustainable and responsible business on page 23
Ethics and governance, including Code of Conduct, anti-bribery and corruption policies	Sustainable and responsible business on page 21 Corporate Governance section on pages 46 to 51

Branches
In addition to the subsidiaries disclosed in note C6 of the Company’s separate financial statements on page 120, there is a branch in Stockholm, Sweden through which research and development activities are conducted.

Dividends
No interim or final dividend was proposed or paid for the year ended 31 December 2024. No interim or final dividends were paid for the year ended 31 December 2023.

→ **Details on dividends are set out in note 14 on page 97**

Capital structure
Details of the issued share capital, together with details of the movements in the Company’s issued share capital during the year, are shown in note 27. The Company has one class of ordinary shares which carries no right to fixed income. Each share carries the right to one vote at general meetings of the Company, except for shares held in the Xaar Share Incentive Plan trust and shares held by Xaar Trustee Limited, which hold no voting rights.

There are no specific restrictions on the size of a holding nor on the transfer of shares, which are both governed by the general provisions of the Articles of Association and prevailing legislation. The Directors are not aware of any agreements between holders of the Company’s shares that may result in restrictions on the transfer of securities or on voting rights.

Capital structure continued

There are a number of employee share schemes, namely, Employee Share Option Schemes (ESOP), Long-Term Incentive Plans (LTIPs), Share Incentive Plans (SIP), and Share Save Schemes (SAYE). There is a Deferred Bonus Plan for the Executive Directors, as introduced in 2020.

+ Details of the shareholding held in trust by Xaar Trustee Limited and held by the Xaar plc ESOP trust are provided in note 27. These have voting rights exercised by the Trustees.
+ Details of other share-based payment schemes are set out in note 30.
+ No person has any special rights of control over the Company's share capital and all issued shares are fully paid.

The business of the Company is managed by the Board, which may exercise all the powers of the Company subject to the Articles and the Companies Act

→ **The powers of Directors are described in the Main Board terms of reference, copies of which are available on request, and the Corporate Governance statement, division of responsibilities on page 33**

Capital allocation policy

The Company is committed to investing in the growth strategy of the business. This investment includes both capital investments within existing operations as well as pursuing inorganic growth opportunities that align with the Company's strategy, investing in capability and capacity to accelerate our strategy and future growth. The Company's objective is to maximise long-term shareholder returns through a disciplined deployment of capital and resources, and it has adopted the following capital allocation policy in support of this:

+ Organic growth: The Company invests in capital projects and R&D relating to ongoing and new technology development to support demand in our chosen and target markets and product innovation;
+ Inorganic growth: The Company continues to explore complementary inorganic growth and acquisition opportunities consistent with the growth strategy and supplementary to our existing innovation and product pipeline; and
+ Treatment of excess capital and shareholder distributions: The Board keeps under review the Company's balance sheet and cash position in line with this policy and medium-term investment requirements. The Company returns excess capital to shareholders if and when the Board considers it appropriate by means of a dividend or a share repurchase. The Company assesses the underlying profitability and the future cash requirements of the business at least annually, as well as the distributable reserves available, to determine the appropriateness of paying a dividend to shareholders, and to review the appropriate policy to adopt.

At this current time, capital resources are focused on and deployed to supporting organic growth and inorganic growth. The Board keeps the Company's capital structure under regular review.

Treasury

The Group's policy enables it to use financial instruments to hedge foreign currency exposures. The main trading currency of the Group is GBP Sterling. The Group's use of financial instruments and the related risks are discussed further in notes 21 and 29.

At the 2024 AGM held on 29 May 2024, the Company's shareholders granted the Company authority to make one or more market purchases (within the meaning of section 693(4) of the Companies Act 2006) of ordinary shares of 10 pence each in the capital of the Company.

The Company did not purchase any shares for cancellation or to be held as treasury shares in 2024 or 2023.

Directors and their interests

The Directors who served during the year, and subsequent to the year-end, unless otherwise stated, were as follows:

Andrew Herbert
Chairman

John Mills
Chief Executive Officer

Paul James
Chief Financial Officer (appointed 20 November 2024)

Richard Amos
Senior Independent Director

Inken Braunschmidt
Senior Independent Director (appointed 1 June 2024)

Jacqueline Sutton
Non-Executive Director

Stuart Widdowson
Non-Executive Director (appointed 27 February 2024)

Ian Tichias
Former Chief Financial Officer (resigned 20 November 2024)

Alison Littley
Former Senior Independent Director (resigned 30 June 2024)

→ **Brief biographical descriptions of the Current Directors are set out on page 35**

Directors' report continued
Report on the affairs of the Group

Shareholdings in the Company

The interests of the Directors in the shares of the Company and its subsidiaries (all of which are beneficial) as at 31 December 2024 are as follows

	Number of ordinary shares of 10p each 31 December 2024 or date of appointment	Number of ordinary shares of 10p each 31 December 2023
Andrew Herbert	**100,000**	100,000
John Mills	**130,294**	125,000
Paul James (appointed 20 November 2024)	**–**	N/A
Richard Amos	**–**	–
Inken Braunschmidt (appointed 1 June 2024)	**–**	N/A
Jacqueline Sutton	**–**	–
Stuart Widdowson (appointed 27 February 2024)	**25,000**	25,000

There have been no changes in the Directors' interests in shares of the Company between 31 December 2024 and 24 March 2025. Directors' interests in options in the Company and in deferred bonuses (in shares) are shown in the Directors' Remuneration Report. The Executive Directors are required to receive a portion of their bonus in deferred shares. These shares are held in trust until the end of the deferral period.

Directors' liabilities

Xaar plc, the ultimate Parent Company, and its subsidiaries have granted an indemnity to all of the Directors of Xaar plc and of its subsidiaries against liability in respect of any potential proceedings that may be brought by third parties, subject to the conditions set out in the Companies Act 2006. Such qualifying third-party indemnity provision was in place during the year and remains in force as at the date of approving the Directors' report.

Share capital

As at 31 December 2024 the Company had been notified in accordance with Chapter 5 of the Financial Conduct Authority's (FCA's) Disclosure and Transparency Rules of the following material interests in its share capital:

Top ten shareholders (by holding) – at 31 December 2024	**Number of ordinary shares held**	Percentage of issued share capital
Schroder Investment Mgt	**19,080,174**	24.01%
Odyssean Investment Trust	**13,175,000**	16.58%
Ameriprise Partners	**9,696,016**	12.20%
Aberforth Partners	**7,937,509**	9.99%
Canaccord Genuity Wealth Mgt	**2,390,548**	3.01%
Charles Stanley	**2,337,945**	2.94%
Hargreaves Lansdown Asset Mgt	**2,155,867**	2.71%
Ruffer	**2,000,000**	2.52%
Killik Asset Mgt	**1,982,235**	2.49%
Interactive Investor	**1,839,579**	2.31%
Total	**62,594,873**	78.76%

During the period 31 December 2024 to 24 March 2025, the Company had been notified in accordance with Chapter 5 of the FCA's Disclosure and Transparency Rules of the following material interests in its share capital:

Changes in material shareholdings since 31 December 2024	**Number of ordinary shares held**	Percentage of issued share capital
Aberforth Partners	**8,003,509**	10.07%
Ameriprise Partners	**7,737,166**	9.73%
Schroder Investment Mgt	**15,774,774**	19.85%

Annual General Meeting

→ The notice convening the Annual General Meeting is set out on pages 125 to 127

Resolutions 1 to 11 set out in the notice of the meeting deal with the ordinary business to be transacted at the meeting. The special business to be transacted at the meeting is set out in Resolutions 12 to 15.

Annual Report

Resolution 1

The Board presents its Annual Report and the Financial Statements for the year ended 31 December 2024 to the Meeting.

Auditors

Resolutions 2 and 3

The Board proposes that PKF Littlejohn LLP is appointed as the Auditor of the Company to hold office until the conclusion of the next general meeting at which accounts are laid before the Company and that the Audit Committee is authorised to agree the remuneration of the Auditor.

Re-election of Directors

Resolutions 4 to 10

The Articles of Association provide that all Directors should be subject to re-election by their shareholders every year. In accordance with this provision and in keeping with the Board's aim of following best corporate governance practice, all Directors retire at each Annual General Meeting and offer themselves for re-election.

Andrew Herbert, the Chairman and Non-Executive Director, was appointed to the Board in 2016 and will reach his ninth anniversary as a Director on 1June 2025. The process to search for a new Chairman has commenced. It is proposed that Mr Herbert offers himself for re-election at the forthcoming AGM and remain as Chairman and Director for an interim period until the transition to his successor has been completed.

Directors' Remuneration report

Resolution 11

This Resolution seeks shareholder approval for the Directors' Remuneration report.

→ The Directors' Remuneration report can be found on pages 57 to 58 (inclusive) of the Annual Report and Financial Statements

In accordance with regulations which came into force on 1 October 2013, Resolution 12 offers shareholders an advisory vote on the Directors' Remuneration report.

Power to issue securities

Resolutions 12 and 13

Under section 551 of the Companies Act 2006 (the 'Act'), the Directors may only allot shares or grant rights to subscribe for or convert any securities into shares if authorised by the shareholders to do so.

Resolution 12, which complies with guidance issued by the Investment Association, will, if passed, authorise the Directors to allot ordinary shares or grant rights to subscribe for or convert any securities into ordinary shares, up to an aggregate nominal value of £2,649,306.30 (corresponding to approximately one-third of the issued share capital at 24 March 2025) and up to an additional aggregate nominal value of £5,298,612.60 (corresponding in aggregate to approximately two-thirds of the issued share capital at 24 March 2025) in the case of allotments only in connection with a fully pre-emptive rights issue. The Directors may consider using the authority if they believe it would be appropriate in respect of business opportunities that may arise consistent with the Company's strategic objectives.

This authority will expire no later than 15 months after the passing of the Resolution. It is the Board's current intention to seek renewal of such authority at each future Annual General Meeting of the Company.

Directors’ report continued
Report on the affairs of the Group

Disapplication of pre-emption rights

Resolution 13

Under section 561(1) of the Act, if the Directors wish to allot equity securities (as defined in section 560 of the Act) they must in the first instance offer them to existing shareholders in proportion to their holdings. In addition, there may be occasions when the Directors will need the flexibility to finance business opportunities by the issue of shares without a pre-emptive offer to existing shareholders. This cannot be done under the Act unless the shareholders have first waived their pre-emption rights.

Resolution 13 seek authority from shareholders from within the guidelines set by the Pre-Emption Group. Under Resolution 13, to be proposed as a Special Resolution, authority is sought to allot shares:

i. in relation to a pre-emptive rights issue only; and

i. in any other case, up to an aggregate nominal amount of £794,791.80 (representing 10% of the issued share capital of the Company).

If Resolution 13 is passed, the authorities will expire at the conclusion of the next Annual General Meeting of the Company, or, if earlier, the date which is 15 months after the date of passing of the Resolutions. It is the Board’s current intention to seek renewal of such authorities at each future Annual General Meeting of the Company.

Authority to purchase own shares

Resolution 14

It is proposed by Resolution 14, by Special Resolution, to authorise the Company generally and unconditionally to purchase its own shares at a price of not less than the par value of the shares and not more than the higher of:

i. 5% above the average of the middle market quotations of the shares as derived from the London Stock Exchange Daily Official List for the five dealing days immediately preceding the day on which the purchase is made; and

i. the higher of the price of the last independent trade and the highest current independent bid on the trading venue where the purchase is carried out (in each case exclusive of any expenses payable by the Company).

The authority will be for a maximum of 10% of the Company’s issued share capital and will expire at the earlier of the next Annual General Meeting

of the Company or within 15 months from the date of the passing of this Resolution. The Directors currently have no intention to exercise the authority and will only purchase shares if it is in the best interests of shareholders as a whole.

The total number of ordinary shares under option, which remain unexercised and outstanding as at 24 March 2025 (including options awarded under LTIP which may be satisfied by subscription for new shares), was 4,075,629. This represents 5.13% of the issued ordinary share capital at that date.

If the Company was to buy back the maximum number of ordinary shares permitted pursuant to the passing of this Resolution, then the total number of ordinary shares under option which remain unexercised and outstanding as at 31 December 2024 would represent 5.70% of the reduced issued ordinary share capital.

Action to be taken

As detailed in the notes to the notice convening the Annual General Meeting, you will not receive a Form of Proxy for the Annual General Meeting in the post. Instead, you can vote online at www.signalshares.com. To register, you will need your Investor Code, which can be found on your share certificate; once logged on, click on the ‘Vote Online Now’ button to vote. Proxy votes should be submitted as early as possible and in any event, no later than 48 hours before the start of the meeting (excluding weekends and public holidays). Shareholders attempting to attend the meeting will be refused admission.

You may request a hard copy proxy form directly from the registrars, MUFG Corporate Markets on 0371 664 0391. (Calls cost 12 pence per minute plus your phone company’s access charge. If you are outside the United Kingdom, please call +44 371 664 0391. Calls outside the United Kingdom will be charged at the applicable international rate). Lines are open between 9.00a.m. to 5.30p.m., Monday to Friday, excluding public holidays in England and Wales.

Additional information for shareholders

The following provides the additional information required for shareholders as a result of the implementation of the Takeovers Directive into UK law. The structure of the Company's issued share capital is shown in note 27.

Details of ordinary shares held in trust owned by the Company can be found in note 27.

The total cost of the research and development expenditure is set out on page 10 of the Strategy Report and in note 7.

Employees are provided with regular updates by the senior management team on the Company's performance and its wider market through online briefings and meetings with the CEO and CFO. Further details on the Company's employee benefits are set out on page 22.

The Company is not aware of any agreements between shareholders that may result in restrictions on the transfer of securities and/or voting rights.

The Directors are authorised to issue and allot shares and to undertake purchases of the Company's shares. Appropriate resolutions to renew these authorities are proposed to be passed at the Annual General Meeting as detailed above and notice of which is on pages 125 to 127.

→ **The notice of the Annual General Meeting is on pages 125 to 127**

Ordinary shares

On a show of hands at a general meeting of the Company every holder of ordinary shares present in person and entitled to vote shall have one vote for every ordinary share held and, on a poll, every member present in person or by proxy and entitled to vote shall have one vote for every ordinary share held. The notice of the Annual General Meeting on pages 128 to 131 specifies deadlines for exercising voting rights either by proxy notice or present in person or by proxy in relation to resolutions to be passed at the Annual General Meeting.

All proxy votes are counted and the numbers for, against or withheld in relation to each resolution are made available at the Annual General Meeting and are published on the Company's website after the meeting. No person holds securities carrying special rights with regard to control of the Company.

Restrictions

There are no restrictions on the transfer of ordinary shares in the Company other than:

+ certain restrictions may from time-to-time be imposed by laws and regulations (for example, insider trading laws and market requirements relating to close periods); and
+ pursuant to the Listing Rules of the FCA whereby all employees of the Company require the approval of the Company to deal in the Company's securities.

Articles of Association

The Company's Articles of Association may only be amended by a Special Resolution at a general meeting of the shareholders. Directors are reappointed by Ordinary Resolution at a general meeting of the shareholders.

Appointment and replacement of Directors

With regard to the appointment and replacement of Directors, the Company is governed by its Articles of Association, the UK Corporate Governance Code, the Companies Act and prevailing legislation.

The Board can appoint a Director but anyone so appointed must be elected by an Ordinary Resolution at the next general meeting. All Directors are required to submit themselves for re-appointment every year at the AGM (see: Re-election of Directors, above) in line with the UK Corporate Governance Code.

A Director may be removed by the Company in certain circumstances set out in the Articles of Association or by an Ordinary Resolution of the Company.

Significant interests

→ **Directors' interests in the share capital of the Company are shown in the table on page 38**

→ **Major interests (i.e. those greater than 3%) of which the Company has been notified are shown on page 38**

Company share schemes

The Xaar plc ESOP Trust holds 0.18% (2023: 0.29%) of the issued share capital of the Company in trust for the benefit of employees of the Group and their dependants. Xaar Trustee Limited holds 0.11% (2023: 0.12%). The voting rights in relation to these shares are exercised by the Trustees.

Change of control

The Company is not party to any agreements which take effect, alter or terminate upon a change of control of the Company following a takeover bid. There are no agreements between the Company and its Directors or employees providing for compensation for loss of office or employment (whether through resignation, purported redundancy or otherwise) that occurs because of a takeover bid. Depending on the achievement of performance conditions, share-based payment arrangements may vest on change of control but this is subject to the approval and exercise of the discretion of the Remuneration Committee.

Going concern

The consolidated financial statements are prepared on a going concern basis. Having considered the Group's forecast financial performance and cash flows, and after making appropriate enquiries, the Directors have a reasonable expectation that the Group has adequate financial resources to continue in operational existence for the foreseeable future and for at least one year from the date that these consolidated financial statements are signed. For these reasons, they continue to adopt the going concern basis in preparing the consolidated financial statements. Accordingly, these financial statements do not include any adjustments to the carrying amount or classification of assets and liabilities that would result if the Group were unable to continue as a going concern.

In preparing forecasts Xaar considers all external factors that could impact on financial performance and makes appropriate allowances for these. The forecast informing the decision to prepare the consolidated financial statements on a going concern basis considered, among other things; the ongoing impact on sales to China due to local economic issues, the likelihood of inflationary pressures resulting from macro-economic factors, and the wars in Ukraine and Gaza. Furthermore, forecasts have been subject to sensitivities to assess the impact on revenue generation, profitability and liquidity of wider market disruption in certain customer and supplier markets and uncertainty in timing of revenues expected from significant strategic opportunities.

A reverse stress test has been performed to model the circumstances required to eliminate available liquidity during the going concern period, this includes reducing revenues. This reverse stress scenario would require a reduction in Group revenue in excess of 22% in comparison to the base case, before considering any significant mitigating actions, which would be below the actual reported result for the year ended 31 December 2024 (on a like-for-like basis). The Directors believe the possibility of this combination of severe downsides arising to be remote given the recurring revenue base, visibility of committed orders and expected new revenue streams secured from products known to be launching by OEMs throughout 2025.

In the unlikely event of such a scenario materialising, the Group has a range of mitigating actions, focused on reducing the Group's cost base, that could be taken to avoid a liquidity shortfall. Namely, deferring non-committed capital expenditure, delaying, or suspending research and development expenditure, and/or ultimately even making headcount reductions. It is worth noting that such actions would only be required in the event of an extreme downside scenario.

The Group is continuously monitoring and mitigating, where possible, the impacts of such risks. There is a high degree of predictability within the Group's short-term cash flows as they reflect existing technologies and products, existing OEM adoption and the committed order pipeline. The level of sensitivity testing, and reverse stress testing performed is proportionate to this level of predictability.

The Group's business activities, together with the factors likely to affect its future development, performance and financial position are set out in the Strategic Report on pages 3 to 20.

The Group continues to have a net current assets position and maintains sufficient financial resources as at 31 December 2024. These consist of cash and cash equivalents of £8,711,000 as well as £5,000,000 of committed, but undrawn, banking facilities made available under a revolving credit facility agreement which expires in June 2026. The revolving credit facility is subject to leverage, interest cover and capital expenditure threshold covenants. In addition, to support the Group's working capital position, alongside the above core banking facilities, the Group also has access to ancillary funding arrangements in the form of an invoice discounting facility; of which £557,000 of the total £3,000,000 committed facility was utilised as at 31 December 2024. Details of the Group's objectives, policies and processes for managing its capital and its exposure to financial risks, including both credit risk and liquidity risk, are included in Note 29.

Viability Statement

The long-term viability of the Group is assessed by the Directors as part of the risk management process and regular strategic reviews.

The Company has undertaken thorough strategic planning of all three business units which has resulted in a three-year plan which takes into consideration the principal risks, product portfolios and R&D roadmaps, the market opportunities, our competitive position, core capabilities, and the cost structure, effectiveness and efficiency of the organisation. Details of which are outlined in the strategic review on pages 5 to 8.

The plan forms the basis for strategic actions to be taken across the Company and the key objectives for each business. These objectives, and the key performance metrics associated with these, are regularly reviewed by the Directors.

The Company is aware that it operates in an uncertain environment and faces risks both internally and externally that could potentially impact on the Company's ability to achieve its strategy.

The principal risks and uncertainties faced by the Company are included on pages 13 to 19.

As part of the process of reviewing these risks, and other potential risks, the Board assigns responsibility for these to members of the Executive Committee. It is the responsibility of the Executive Committee members to manage the risk and the mitigating actions. This ensures that the Company manages the risks it faces appropriately and that these are considered in all financial models.

Viability Statement continued

The Board has assessed the viability of the Group over a three-year time frame based on the development cycles of our competitors and those of our customers and the probability this could lead to technological advancements that disrupt the markets that Xaar operates in.

The Board has considered plausible principal risks and the financial impacts that these could have over a three-year period were conservatively assumed in the Group's mid-term planning exercise.

Taking account of the Group's and Company's current financial position, operating performance, and the principal risks and uncertainties, the Directors have assessed the prospects of the Company, and confirm that they have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due for the next three years to December 2027.

Auditor

The Directors appointed PKF Littlejohn LLP as auditor in 2023 to fill a vacancy, following a tender process and reappointed at the 2024 AGM. They have expressed their willingness to continue in office as auditor and a resolution to appoint them will be proposed at the forthcoming AGM.

Directors' statement as to disclosure of information to auditor

→ **The Directors who were members of the Board at the time of approving the Directors' report are listed on page 35**

Having made enquiries of fellow Directors, each of these Directors confirm that:

+ To the best of each Director's knowledge and belief, there is no information relevant to the preparation of their report of which the Group's auditor is unaware
+ Each Director has taken all the steps a Director might reasonably be expected to have taken to be aware of relevant audit information and to establish that the Group's auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Approval

The Directors' report was approved by the Board on 24 March 2025 and is signed on its behalf by:

Andrew Herbert
Chairman

Section 172 statement

The Companies Act 2006 (the 'Act'), as amended by the Companies (Miscellaneous Reporting) Regulations 2018, requires companies to include a 'Section 172(1) Statement' in the Strategic Report describing how directors have had regard to the matters set out in Section 172 (1) (a) to (f) of the Act when performing their duties.

Section 172 of the Act requires directors of a company to act in a way they consider, in good faith, would be likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to:

1. Likely consequences of any decision in the long term,
2. Interests of the company's employees,
3. Need to foster the company's business relationships with suppliers, customers and others,
4. Impact of the company's operations on the community and the environment,
5. Desirability of the company maintaining a reputation for high standards of business conduct, and
6. Need to act fairly as between members of the Company.

The Directors' duties under Section 172 are embedded in all of the decisions that the Board and its Committees make, together with a range of other factors, including alignment with our strategy and our values. Accordingly, information on how s.172 matters have been considered during the year are detailed throughout this Annual Report.

The Board understands the importance of effectively engaging with the Company's key stakeholders, in order to better understand their views and interests, and the potential impact of the Directors' decisions on them.

The Board is aware that the interests of stakeholders may not always align with each other and that it may not always be possible to provide a positive outcome for all stakeholders from a given decision.

The Board strives to follow best corporate governance practice and has a governance framework in place that allows it to make reasoned and informed decisions. Further information on how the Board and its Committees operate can be found in the Corporate Governance statement on pages 49 to 54 of this Annual Report.

The identification and assessment of risk is an integral part of the Board's decision-making process, particularly when it comes to considering the longer-term consequences and the sustainability of the Company's business model and strategy. The Group maintains a risk register, which the senior leadership team maintain, which is presented to the Board on an annual basis.

→ **More details of our approach to risk management are set out on pages 13 to 19**

Stakeholder engagement

The Directors have ongoing engagement with all of our key stakeholders:

+ our Investors
+ our People
+ our Communities
+ our Partners.

The Directors continually review the impact that any decisions will have on these key stakeholders.

The Board regularly reviews the Company's principal stakeholders, and how it engages with them. This is achieved through information provided by management and by direct engagement with the stakeholders themselves.

Shareholders

All Board decisions are made to promote the long-term success of the Group for the benefit of our shareholders.

We maintain strong relationships with shareholders, ensuring they understand our strategy, the progress and performance against key milestones and that we understand how they view our business. We engage with our shareholders through Investor Roadshows and webinar presentations led by the Chief Executive Officer and Chief Financial Officer, in addition to written communication from and meetings as required with the Chairman, Committee Chairs and Executive Directors.

The Group's brokers provide independent feedback to the Board on shareholder opinions and their views on our meetings with investors. Regular trading updates are provided as well as the Annual Report and Interim Report.

Information provided at analysts' meetings and financial press releases are made available on the Group's website. We engage with investors to gain and maintain support for our strategy, and feedback received has informed the Board's discussions and decisions on Group strategy.

→ **More details of our engagement with our shareholders and the results of those engagements are set out in the Corporate Governance statement on pages 46 to 51 and the Directors' Remuneration report on pages 57 to 58**

Employees

Our people are a highly skilled, technical, and valued workforce. They are essential to the Group's ability to stay ahead in a fast-moving world.

Our people play a crucial role in helping us pursue our strategic goals and are core to the success of the business. We engage and support them to achieve their full potential. There are regular internal communications from the management team and feedback from employee working and representative groups, such as the Sustainability team, Exec Exchange and Meet the NEDs. Regular engagement with employees improves open dialogue channels, collaboration, visibility of achievements and progress across the business, as well as transparency.

→ **The health and safety of our employees is of the highest importance to us. More details of our engagement with our employees and the results of those engagements are set out in Sustainability and responsible business on page 21**

Community

As a Group, we have a wide-reaching indirect impact on the communities and environments we interact with and are committed to making sure that this impact is as positive as possible.

Xaar is a responsible citizen within our communities, offering local recruitment, supporting educational institutions and the local economy. Xaar offers a range of employment opportunities for apprentices and we work closely with educational establishments. We look to minimise our impact on the environment. We are investing to reduce greenhouse gas emissions and have transferred electrical supply over to 100% renewable source, invested in electric vehicle charger and installed LED lighting.

→ **More details of our engagement with our communities and the results of those engagements are set out in the Sustainability and Responsible Business Report on page 23**

Customers

Our customers depend on us to supply high quality products in a timely manner. We also support them in the development of their next generation products. They expect us to operate in a responsible manner maintaining the highest standard of business ethics.

The Board is regularly updated on the timeliness and quality of product deliveries to our customers as well as developments with targeted customers, new customer wins and a sales pipeline, including how the product roadmap aligns. Our sales and engineering teams engage with our customers and solicit feedback which is used to inform our technology roadmaps.

The key account management structure across the business encourages meaningful, consistent and ongoing engagement with OEM and UDI customers. There are regular exchanges with our customers on their new programmes especially through engineer-to-engineer interactions so that we can better understand their emerging needs.

We invested £5.0 million in R&D during 2024, focusing on those areas where we see the opportunity to support our customers' next generation product developments.

→ **More details of our engagement with our customers and the results of those engagements are set out in our Business Model on page 2**

Suppliers

Our relationships with our suppliers and partners are integral to the delivery of quality products to our customers and the operational success of our business.

The supply of goods and services to our operations is critical to our overall success. We regularly review the performance of our suppliers and work with them to implement improvement programmes.

The Group has established a comprehensive set of policies covering the areas of business ethics. We require our suppliers to operate to the same high standards and these are set out in our Supplier Code of Conduct which they are required to adhere to. Thus ensuring high standards throughout our Tier 1 supply chain, by measuring and auditing our key suppliers against specific criteria, including human rights (human trafficking, anti-slavery, prohibition of child labour) and conflict minerals policies.

Corporate Governance statement

The Board's primary objective remains ensuring long-term, sustainable growth for the benefit of the Company's shareholders and wider stakeholders. This includes an ongoing commitment to the highest standards of corporate governance as set out in the Financial Reporting Council (FRC) 2018 UK Corporate Governance Code ('the Code').

The 2018 UK Corporate Governance Code is a set of principles and provisions that emphasise the value of good corporate governance to long-term sustainable success and achievement of wider objectives. The Code can be found on the FRC's website at www.frc.org.uk.

Application of the main principles of the Code

The Board has considered and implemented the provisions of the Code effective 1 January 2019.

We are pleased to confirm that throughout the year ended 31 December 2024, the Company has followed the principles and provisions of the UK Corporate Governance Code 2018, which applies to all companies with a premium listing on the London Stock Exchange, and has either complied with the provision or explained why the provision has not been followed.

The governance report gives:

+ Disclosure of Board discussions and the resulting actions
+ A clear and honest view of progress throughout the year
+ The outcome of our Board evaluation
+ Our approach to ensuring long-term viability of the business
+ Our approach to risk and mitigation.

Statement of compliance with the Code

Throughout the year ended 31 December 2024 the Company has followed the provisions set out in the Code and has either complied with the provisions of the Code or explained why the provision has not been followed, as outlined below. The FRC expects companies to provide a clear and meaningful explanation for any departures from the Code. This report on the Company's compliance with and application of the Code has been approved by the Board and includes this Statement, the Directors' report on pages 36 to 43, the report of the Audit Committee (see pages 52 to 54), the Nomination Committee report (see pages 55 to 56) and the Directors' Remuneration report set out on pages 57 to 68.

A copy of the Code can be found on the FRC website at www.frc.org.uk.

The disclosures in respect of the Takeovers Directive (as implemented in the UK) are included in the Directors' report and form part of this report.

1. Board Leadership, Culture and Company Purpose

The Board is responsible for leading the Group, focusing primarily upon strategic and policy issues, and is responsible for ensuring the long-term sustainable success of the Group. It is responsible for effective risk assessment and management. In performance of these duties, the Board has regard to the interests of the Group's key stakeholders, generating value for the shareholders and contributing to the benefit of wider society.

In order to achieve this the Board has established a clear vision: 'A world where you can print anything you can imagine', with our mission being 'we help companies and industries be more colourful, creative and productive through our world-class technology and printheads'.

The Board has updated the core values which shape our culture and contribute to our success, which are EPIICC:

+ We do Everything with Passion
+ We are Innovative
+ We have Integrity
+ We are Creative
+ We are Collaborative.

The Board is responsible for establishing, assessing and monitoring the Company's purpose, values, strategy, and culture. In doing so, the Board ensures the alignment of the Company's culture and the transformation programme. The Board receives regular updates on the work being undertaken by the senior management team to align the operations and policies of the Group with its culture and values. Other than their normal attendance and participation in discussions at Board meetings, the Executive Directors are responsible for the day-to-day running of the Group and the implementation of the agreed strategy.

→ **Refer to pages 3 to 31 for the Strategy review and page 2 for Company values and culture**

The Group has three main locations. The head office functions, R&D, marketing, human resources, legal and finance are based in Cambridge, UK. The Group has three manufacturing facilities with offices: Huntingdon, Kettering, UK and the other in Vermont, USA. The Group also has representatives in other global locations including Spain, China, Hong Kong, and Sweden.

→ **Refer to pages 2 and 3 for the Xaar business model**

In accordance with the Directors' duties in Section 172 of the Companies Act 2006, the Board considers the likely consequences of any decision in the long-term. The Board incorporates the basis on which the Company generates and preserves value in formation of the strategy and strategic decision-making.

→ **Refer to pages 41 to 51 for the s.172 disclosure**

The key focus this year has been on managing costs while developing capability and opportunity to deliver future growth. It has been a priority to maintain the progress made by the business in recent years during a period of macro-economic uncertainty with inflationary pressures in energy costs and continued challenges in the supply chain. The Board has ensured there is a focus on our core competence of the design and manufacture of world leading printheads. It has continued to ensure the financial position of the Company is secured whilst also looking forward to the longer-term strategic options for the Group, including identifying potential further acquisitions that would bring additional value and synergies.

In particular, the main Board decisions during the year were:

+ Continuing to invest in R&D and the product roadmap with further product development.
+ Held a Strategic Review session over two days with presentations from senior management on key strategy issues for the Group over the next three years.
+ Agreed a strategic review of the Group's interests in the USA.
+ Considered the impact of changing revenue expectations for 2025.

Engagement with shareholders

The Board and Directors seek to build on a mutual understanding of objectives between the Group and its institutional shareholders by providing the opportunity to meet at least twice per year, following interim and annual results, to provide an update on trading and obtain feedback.

The Board uses the AGM to communicate with investors and to encourage their participation.

Following a general meeting, voting results are published on the Company's website. If the votes against a resolution exceeded 20%, an explanation would also be published on the website. At the most recent AGM in 2024, the majority of resolutions had less than 1% of votes cast against the Board's recommendation. The exception being Resolution 12 (the power to allot securities) with 21.96% of votes cast against the Board's recommendation.

The Company engaged with shareholders both throughout the year and specifically in respect of resolutions where noteworthy votes were against the Board's recommendation, in order to better understand shareholders' thoughts and align resolutions with the members' views.

Feedback from brokers and financial PR

The Group's financial public relations advisors and lead brokers give all investors and potential investors who have met with the Group's investor relations team the opportunity to provide feedback on the meetings. Additionally, the Chief Executive Officer and the Chief Financial Officer provide feedback to the Board at the meeting following shareholder meetings to ensure that the Board, and in particular the Non-Executive Directors, possess an understanding of the views of the Company's major shareholders. Both the Chairman and the Senior Independent Director are available to meet with shareholders as required.

Annual Report and Accounts

We review feedback from shareholders and other stakeholders and take this into consideration when drafting our Annual Report and Accounts. We make our Annual Report and Accounts available on our website as soon as it is practicable following our final earnings release. Shareholders can access up-to-date Company information, including video presentations, from the Investors section of the Xaar website at www.xaargroup.com.

Workforce engagement

The Board continued to hold employee engagement sessions which are held during the year with the three independent Non-Executive Directors being responsible on behalf of the Board for workforce engagement. Topics discussed were wide-ranging but focused mainly around the strategy and direction of the business, acquisitions and divestments, sustainability, executive remuneration and alignment with the wider workforce, employee training, opportunities for development, and the workings of the Board and governance, i.e. a total of two sessions in total.

Conflict of interest and time commitment

Following the changes made to the Company's Articles of Association to incorporate the provisions of section 175 of the Companies Act 2006 which gave boards the statutory power to authorise conflicts of interest, any potential conflict of interest is approved by the Board in advance of any action or appointment that could result in a conflict of interest arising. Internal controls are in place to ensure that any related party transactions involving Directors, or their connected parties, are conducted on an arm's length basis. Each member of the Board is familiar with the procedure to follow in relation to conflicts of interest and the process is operated efficiently. There were deemed to be no such conflicts of interests in 2024.

The only change to Directors' outside commitments during 2024 related to the appointment of Inken Braunschmidt as a non-executive director of TT Electronics plc.

Each Director devoted significant time to their Xaar Board responsibilities during 2024, with all Directors attending the significant majority of Board meetings (see page 51).

Corporate Governance statement continued

2. Division of Responsibilities

The Board discharges its responsibilities by providing strategic and entrepreneurial leadership of the Company, within a framework of strong governance, effective controls and a strong culture emphasising openness and transparency, which enables opportunities and risks to be assessed and managed appropriately. In addition, the Board sets the Company's strategic direction; ensures that the necessary financial and human resources are in place for the Company to meet its objectives; and reviews management performance.

The Chairman, Andrew Herbert, was deemed independent on appointment in 2020. There exists a clear division of responsibilities between the Chair and the Chief Executive Officer, John Mills. The Chair's primary role includes ensuring the Board functions properly, that it meets its obligations and responsibilities, and that its organisation and mechanisms are in place and are working effectively.

The responsibilities of the Chair, Chief Executive, Senior Independent Director, Board and Committees are clear, set out in writing, agreed by the Board and made publicly available, with terms of reference for the Committees available on request.

The Board delegates management of the business to the Executive Committee, comprising Executive Directors and senior operational managers, headed by the Chief Executive Officer. The Executive Committee meets weekly and is responsible for implementing Group strategy, monitoring business performance, preparing the operating and capital expenditure budgets for recommendation to the Board, and ensuring efficient management of the Group.

The Non-Executive Directors attend the Board meetings, and form the Audit, Remuneration and Nomination Committees. They are responsible for scrutinising the performance of management and determining appropriate levels of remuneration of Executive Directors. They also have a key role in appointing and, where required, removing Executive Directors.

The Non-Executive Directors are identified on page 35 of the Annual Report with a short biography provided. The Board has determined that each Non-Executive Director is independent in character and judgement; commits sufficient time and energy to the role; and continues to make a valuable contribution to the Board and its Committees. The Board keeps under review whether there are relationships or circumstances which are likely to affect, or could appear to affect, their independence.

The Company Secretary is the secretary to the Board and its Committees. All Directors have access to the services of the Company Secretary and Directors may take independent legal and other professional advice at the expense of the Company. Julia Crane was appointed as Company Secretary on 16 January 2023.

3. Composition, Succession and Evaluation

Board composition

The Board of Directors comprises the Chairman, two Executive Directors and four Non-Executive Directors.

The Board considers Inken Braunschmidt, Richard Amos, Jacqueline Sutton and Andrew Herbert to be independent within the meaning of the Code. To be considered independent each Non-Executive Director is sufficiently separate to management and free from any business or other relationships which could affect their judgement, impartiality or objectivity. Stuart Widdowson joined the Board on 27 February 2024 as a Non-Executive Director representing a shareholder, Odyssean Capital LLP under the terms of a relationship agreement dated 23 February 2024. He is not considered to be independent.

All the Non-Executive Directors, other than Stuart Widdowson, are deemed to be independent members of the Board having no financial relationship or significant links with related parties. All Non-Executive Directors complete a disclosure document prior to appointment and submit an annual declaration.

Succession

The Nomination Committee is responsible for regularly reviewing the composition of the Board. In recommending appointments to the Board, the Nomination Committee considers the range of skills, knowledge and experience required, with due regard for the benefits of diversity on the Board, including gender. When recruiting, search firms are appointed to secure a strong and diverse list of candidates.

The appointment of new Directors is led by the Nomination Committee. Inken Braunschmidt joined the Board on 1 June 2024 and Paul James was appointed as a Director on 20 November 2024. Alison Littley resigned as Director on 1 July 2024 and Ian Tichias resigned on 20 November 2024.

The Committee has considered succession planning and the good progress made on building an executive management team and focusing on senior management development during the past three years. In making any future appointment the Nomination Committee will consider both diversity and succession as a matter of course as it seeks to further equip the Board in its role of overseeing future business growth and expansion.

Diversity

The Board continues to consider that diversity quotas at Board level are inappropriate, and is committed to recruiting the best talent available, assessed against objective criteria of skills, knowledge, independence and experience. All candidates are therefore considered on merit. The Company does not apply any established measurable objectives in respect of diversity quotas (e.g. age, gender, ethnicity, disability, religion or educational and professional background) but with reference to the Company's Diversity Policy. More information on the Group's gender profile is set out in the report on Sustainable and Responsible Business Report on page 22.

As the Company grows, the Board will keep under consideration the requirements of the Parker Review (2017) to improve the ethnic and cultural diversity of UK boards to better reflect their employee base and communities they serve.

A Board Diversity Policy was adopted by the Directors, on the recommendation of the Nomination Committee. A copy of the policy is available on request.

Board evaluation

The Board conducted an internal review of the effectiveness of itself, with each Non-Executive Director, the Chairman and the Board Committees in December 2024. A questionnaire was completed by the Directors which looked at all areas of the operation and management of the Board and its Committees. The Chairman held discussions with each Director on the results of the evaluation. The outcome of the review was discussed by the Nomination Committee and actions agreed by the Board. From the review and conclusions drawn, areas of improvement were identified as follows:

1. To review the financial reporting to the Board and the structure of the Board papers.
2. To further develop the risk management framework.
3. To develop the Company's investor relations strategy.
4. To focus on the development of the executive management team and talent across the business.

3. Composition, Succession and Evaluation continued

Board evaluation continued

Areas of improvement identified in 2023 were addressed and actions taken and implemented during 2024 as follows:

2023 Recommendations	Action taken in 2024
Agreed changes to the oversight of the risk register.	The Group's Risk Register was reviewed during the year and revised to align better with the Group's principal risks.
To consider holding at least one Board meeting each year at a subsidiary location.	This remains under review. Five directors travelled to China in 2024 and met with customers.
Agreed that the majority of scheduled board and committee meetings should be held in person.	Most meetings are now held in person at the Company's offices in Huntingdon.
Review the annual Board and committee work plan to ensure that key topics are regularly reviewed.	The annual Board and committee annual plan is used as a basis for agenda planning to ensure that all key topics are covered.

→ **Further details of the activities of the Nomination Committee can be found on pages 55 to 56**

As part of the selection process for any potential Directors, any significant external time commitments are considered before an appointment is agreed. All Directors are required to consult with the Chairman of the Board and obtain the approval of the Board before taking on additional appointments.

Executive Directors are not permitted to take on more than one significant appointment as a director of a FTSE 100 company or any other substantial appointment.

The Board's policy for individual Director performance review is for a formal and rigorous appraisal process based on performance by the individual Director against specific targets. Individual Director performance is reviewed at least annually.

+ The Senior Independent Director, in consultation with the other Non-Executive Directors and taking into account the views of the other Directors, appraises the performance of the Chairman.
+ The Executive Directors, in consultation with the Chairman, appraise the performance of the Non-Executive Directors.

It is the Board's intention to review its own performance, and that of its Committees, at least once a year. All Directors were subject to shareholder re-election at the 2024 AGM.

→ **The biographies of the Directors, set out on page 35, contain the evaluation of skills and experience beneficial to the Company so that the Board recommends the re-election or election of each Director**

4. Audit and Risk and Internal Controls

→ **The role and responsibilities of the Audit Committee are set out in the Audit Committee section on pages 52 to 54**

+ The Audit Committee review of the effectiveness of the external audit is set out on page 54.
+ PKF Littlejohn LLP was appointed as auditor in August 2023 following a tender process, and provide no non-audit services; the Audit Committee assessment of the auditor's independence is disclosed on page 54.

→ **The Directors' assessment of the Group's internal control environment as required under the UK Corporate Governance Code is set out on page 54 under 'Internal controls and compliance'**

The Audit Committee, led by Richard Amos, plays a key role in monitoring and evaluating our compliance and risk management processes, providing independent oversight of our external audit and internal control programmes, accounting policies and business transformation projects, and in assisting the Board in establishing arrangements to ensure that we are reporting in a fair, balanced and understandable manner to our shareholders. The Board has satisfied itself that Richard Amos has recent and relevant financial experience and that the Audit Committee as a whole has competence relevant to the sectors in which the Company operates.

→ **The significant accounting judgements and estimation uncertainties that the Audit Committee has considered in relation to the financial statements are set out in the Audit Committee report on pages 52 to 53 and in note 4 to the accounts on pages 88 to 89**

All of the Audit Committee members are independent Non-Executive Directors and have financial and/or related business experience due to the senior positions they hold or have held in other listed or publicly traded companies and/or similar large organisations.

The Board has established arrangements to ensure that reports and other information published by the Group are fair, balanced and understandable. The Strategic Report, set out on pages 2 to 31, provides information about the performance of the Group, the business model, the Group's strategy and the risks and uncertainties relating to the Group's future prospects.

Corporate Governance statement continued

Principal and emerging risks

As set out on page 13, the Board confirms that it has carried out a robust assessment of the principal and emerging risks facing the Company during the year, including those that could threaten its values, reputation, business model, future performance, solvency or liquidity.

→ **Descriptions of principal and emerging risks and how they are mitigated and any changes are set out on pages 14 to 19**

→ **The Group's policies relating to risk management and internal control can be found in the 'Risk management' section of the Strategic Report on page 13**

The Board explains on page 42 of the Directors' Report how it has assessed the prospects of the Company over the longer-term and why it considers a three-year period to be appropriate for the purposes of this assessment. The Board confirms that it has a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over this period.

The Committee has formally identified the Chief Executive Officer as responsible for health and safety and the Chief Financial Officer as responsible for risk assessment.

5. Remuneration

The Remuneration Committee sets levels of remuneration which are designed to promote the long-term success of the Group and structures remuneration so as to link it to both corporate and individual performance, thereby aligning management's interests with those of shareholders.

The Remuneration Committee's primary role is to recommend to the Board the senior management remuneration strategy and framework, giving due regard to the financial and commercial health of the Company and to ensure the Executive Directors and senior management are fairly rewarded for their individual contributions to the Company's overall performance. The remit of the Committee also includes considering the appropriateness of the senior remuneration framework when reviewed against arrangements throughout the rest of the organisation, determining the terms of employment and remuneration for Executive Directors and senior managers, including recruitment and termination arrangements, approving the design, targets and payments for all annual incentive schemes that include Executive Directors and senior managers and agreeing the design, targets and annual awards made for all share incentive plans requiring shareholder approval. The Remuneration Policy was approved by shareholders at the 2023 AGM. The Remuneration Committee has not exercised its discretion in relation to remuneration outcomes in 2024.

Details of the activities of the Remuneration Committee can be found in the Directors' Remuneration report on pages 57 to 68

- The alignment of executive remuneration with Company purposes and values is set out on page 2
- The award of long-term incentives and their performance conditions are set out on page 61
- How the Remuneration Committee addresses the principles set out in the UK Corporate Governance Code in respect of the Directors' Remuneration Policy is set out on page 59
- The discretionary powers of the Remuneration Committee are on page 57
- The alignment of executive pensions with those of the workforce are on page 60
- Recovery and withdrawal provisions (malus/clawback), and the circumstances under which the provisions may apply, are on page 61.

Summary of Board meeting attendance in 2024

Eleven Board meetings were held in 2024, with two additional unscheduled meeting for specific purposes, as set out below.

Jacqueline Sutton was unable to attend one of the two additional unscheduled Board meetings due to medical reasons.

Inken Braunschmidt was unable to attend one of the two unscheduled additional Board meetings and one scheduled Board meeting, due to other business commitments which had been confirmed before her appointment to the Board on 1 June 2024.

Board Committees

Summary of Committee membership, as set out below.

Approval

The Board confirms the 2024 Annual Report and Financial Statements, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the position, performance, strategy, and business model of the Company.

The Corporate Governance statement, which incorporates by reference the Directors' Report, the Audit Committee report, the Nomination Committee report and the Directors' Remuneration report, was approved by the Board on 24 March 2025 and is signed on its behalf by:

Andrew Herbert
Chairman

Summary of Board meeting attendance in 2024

11 Board meetings were held in 2024, with two additional unscheduled meeting for specific purposes:

Name	Scheduled Board Meetings	Additional Meetings
Andrew Herbert	**11(11)**	**2(2)**
Richard Amos	**11(11)**	**2(2)**
John Mills	**11(11)**	**2(2)**
Jacqueline Sutton	**11(11)**	**1(2)**
Inken Braunschmidt (appointed 1 June 2024)	**5(6)**	**1(2)**
Stuart Widdowson (appointed 27 February 2024)	**10(10)**	**1(1)**
Paul James (appointed 20 November 2024)	**2(2)**	**0(0)**
Alison Littley (resigned 30 June 2024)	**6(6)**	**0(0)**
Ian Tichias (resigned 20 November 2024)	**10(10)**	**2(2)**

Board Committees

Summary of Committee membership:

Name	Audit Committee	Remuneration Committee	Nomination Committee
Andrew Herbert	**No**	**Yes**	Chair
Richard Amos	Chair	**Yes**	**Yes**
Inken Braunschmidt (appointed 1 June 2024)	**Yes**	**Yes**	**Yes**
Jacqueline Sutton	**Yes**	**Yes**	**Yes**

Summary of Committee meeting member attendance in 2024

Name	Audit Committee	Remuneration Committee	Nomination Committee
Andrew Herbert	**n/a**	**5(5)**	**5(5)**
Richard Amos	**4(4)**	**5(5)**	**5(5)**
Inken Braunschmidt (appointed 1 June 2024)	**3(3)**	**2(2)**	**1(1)**
Jacqueline Sutton	**4(4)**	**5(5)**	**5(5)**
Alison Littley (resigned 30 June 2024)	**1(1)**	**4(4)**	**4(4)**

1. The Committee may invite Board Directors who are not Committee members to attend the meetings when the subject matter deems their presence appropriate.
2. Inken Braunschmidt replaced Alison Littley as Chair of the Remuneration Committee on 1 July 2024.
3. Stuart Widdowson is a Non-Executive Director but is not deemed to be independent so does not serve on any Board committees.

Figures in brackets denote the maximum number of meetings that could have been attended by each Director.

Audit Committee

The Audit Committee (the 'Committee') is appointed by the Board from the Non-Executive Directors of the Company. The Chair of the Committee is Richard Amos.

Audit Committee composition and meetings

Richard Amos is a Chartered Accountant. His previous roles have given him recent and relevant financial experience working for a number of UK listed companies. Jacqueline Sutton and Inken Braunschmidt, Audit Committee members, also bring a breadth of experience including executive experience in complex and international business operations. Additional information on the Committee's skills and experience can be found in the Board biographies set out on page 35.

The Audit Committee met formally on four occasions during the year. Please see the tables on page 51 for details of the Committee members in the year and the number of Committee meetings attended. At the Committee's request, other members of the Board and senior management may be invited to attend the Audit Committee's meetings based on the meeting agenda.

Report from the Committee Chairman

I am pleased to present the Audit Committee's report describing our work during the past year.

The Audit Committee's work during the during year was focussed on its primary responsibilities which are the following:

+ To approve and monitor key financial and accounting policies and practices
+ To monitor the integrity of the financial statements, announcements and review significant financial reporting judgements contained therein
+ To keep under review the adequacy and effectiveness of internal controls
+ To review procedures, systems and controls for whistleblowing, fraud detection and bribery prevention
+ To review, approve and monitor internal audit activities
+ To monitor and review the Group's external auditor's independence, objectivity and effectiveness
+ To monitor and approve any non-audit services provided by the external auditor
+ To conduct any tender process and make recommendation to the Board on the appointment, remuneration and terms of engagement of the external auditor.

The Committee is not responsible for the identification of key risks or the review of the adequacy of arrangements to mitigate those risks, which remains the responsibility of the Board.

The Committee is required to report its findings to the Board at least annually, identifying any matters on which it considers that action or improvement is needed, to make recommendations on the steps to be taken, and to ensure that the required actions are implemented.

The Committee shall review its terms of reference annually and may recommend to the Board any amendments. The Committee's terms of reference include all matters indicated by Disclosure and Transparency Rule 7.1 and the UK Corporate Governance Code. The terms of reference of the Committee are available on written request from the Company Secretary.

Significant issues considered by the Committee

The Committee has a work plan that is designed to ensure its responsibilities are fully discharged over the annual reporting cycle. Specific items are added to the agenda for individual meetings as required. There were a number of significant accounting matters considered during the year including:

+ Impairment of goodwill, intangible assets and PPE
+ Accounting for the reorganisation and cessation of activities conducted by FFEI Ltd
+ Valuation of contingent consideration balances

Key areas of management judgement

The Committee has reviewed, discussed with and challenged management in respect of the approaches taken for the following areas of key accounting judgement and estimation:

Critical accounting judgements

Capitalisation of development costs

The Group capitalises costs for product development projects. At 31 December 2024, the carrying amount of capitalised development costs was £2,411,000 (2023: £2,325,000). Development costs can be capitalised when they relate to a project that is technically feasible, there is the intention and are adequate resources to be able to complete the project, there are secure future economic benefits in excess of the development costs incurred and all such costs can be reliably measured.

During a printhead product development programme many sub-systems are evaluated in parallel and carry their own levels of risk. For most internal projects, technical feasibility is typically only deemed to have been achieved at the end of a project; as a result, internal costs of development activities are typically not capitalised.

The Audit Committee concurs with the assessment made by management in respect of this matter.

Apportionment of technology-based intangible assets in prior year

In June 2023 the Group entered into a series of transactions in the context of the integration of the recently acquired FFEI Limited business. These consisted of the disposal of the non-core Life Sciences activities and all associated patents, software and technological know-how. On acquisition of FFEI Limited in July 2021, the fair value of these patents was not separately identified. Instead they were grouped with software and technological know-how and recognised in aggregate as a 'technology-based intangible asset'.

In order to retrospectively estimate the fair value separately attributable to the patents, an apportionment methodology has needed to be adopted – this is based on gross margins and estimates of replacement cost. This methodology leverages the approach and data points adopted by external valuation experts when determining the fair value of the technology based intangible asset at the original acquisition date.

Timing of revenue recognition

The assessment used by the Group to determine the timing of revenue recognition could have a significant impact on the amount and timing of revenue recognised. Under certain contracts entered into by the Product Print Systems and, historically, the Digital Imaging segments, revenue has been recognised over time (rather than at a point in time) following judgements taken as to the existence of alternative uses for the custom-built printing solutions being sold and whether the Group has an enforceable right to payment.

Firstly, the assessment of which customer projects include significant customisation (therefore have no alternative use) is based on the extent to which each machine is made to specific, detailed measurements at the request of a customer and takes into consideration the commercial reality underlying each contract. Whilst unlikely, it remains possible that custom-built machines may have an alternative use and could potentially be sold to a different customer. Nevertheless, this remote possibility is not deemed to change the determination of the timing of revenue recognition because selling to an alternative customer would necessitate modifications to the printhead/machinery, therefore, significant additional cost. Secondly, when determining the timing of revenue recognition an assessment is made as to whether the contract contains an explicit enforceable right to payment for performance completed to date, being recovery of labour hours and other costs incurred in satisfying the performance obligations plus a reasonable profit margin.

Where these two factors are assessed to be the case, the performance obligation under the contract is deemed to be satisfied over time.

The Audit Committee concurs with the assessments made by management in respect of all applicable, material contracts with customers.

Estimation uncertainty

Fair value measurement of contingent consideration

An element of the consideration receivable for the Group's divestment in November 2021 of its remaining interest in the share capital of Xaar 3D Limited remains contingent on achievement of certain revenue milestones and performance targets. Contingent consideration, resulting from business combinations, is valued at fair value at the acquisition date as part of the business combination. When the contingent consideration meets the definition of a financial asset, it is subsequently remeasured to fair value at each reporting date with any revaluation gains or losses being recognised in the Consolidated Income Statement. Fair value is estimated using the Monte Carlo simulation. Certain inputs into this statistical model involve estimation; namely, the risk adjusted discount rate and revenue volatility. These estimates are subject to rapid changes in market conditions that cannot always be fully anticipated. In light of the materiality of contingent consideration held in the Consolidated Statement of Financial Position, this uncertainty is considered to represent a key source of estimation uncertainty. Contingent consideration with an estimated fair value of £10,863,000 was recognised at the acquisition date and remeasured to £4,918,000 as at the reporting date. Future developments may require further revisions to the estimated fair value. The maximum consideration potentially receivable at the acquisition date was £16,691,000. Full sensitivity to changes in these estimates is provided in Note 29. During 2024 the fair value of the contingent consideration has been considerably reduced. This is due to a reduction in the revenue forecasts for the disposed business which have resulted in the final revenue milestone (Milestone 3) no longer being expected to be achieved before the milestone window closes on 6 October 2026. Management view is that Milestone 2 will be received in late 2025 or early 2026.

The Audit Committee concurs with the assessment made by management that the fair value of this asset is appropriately measured and the impact of the estimation uncertainty is adequately disclosed in the financial statements.

Assessment of the carrying value of goodwill and other intangible assets

The Group reviews goodwill for impairment on at least an annual basis and more frequently where there are indicators of potential impairment.

This review requires the value-in-use of each CGU to be estimated, these calculations are based on a number of assumptions. The assumptions relating to future cash flows, estimated useful economic lives and discount rates are based on forecasts and are, therefore, inherently judgemental. The assumptions used in the impairment test are detailed in Note 15. The assumptions relating to future cash flows, estimated useful economic lives and discount rates are based on forecasts and are, therefore, inherently judgemental. Future events could result in the assumptions used needing to be revised, changing the outcome of the impairment test and resulting in impairment charges being recognised in the Consolidated Income Statement.

The Audit Committee concurs with the assessment made by management that the acquired Customer Relationships intangible asset allocated to the Digital Imaging CGU should be fully impaired and that, after this write-down, the recoverable values of all CGUs exceed the carrying value of the underlying assets, therefore, no impairment of Goodwill is required. Furthermore, it is agreed that the disclosures provided in Note 15 are proportionate and appropriate in light of the levels of headroom available.

Revenue recognition – estimating stage of completion of contracts

Revenue receivable under contracts with customers for the manufacture of bespoke machinery and equipment as well as for the provision of research and development consultancy services is generally required to be recognised over a period of time in line with the stage of completion of each contract with the customer. Such contractual arrangements are isolated to the Product Print Systems and, historically, Digital Imaging segments. In order to estimate the stage of completion of all such contracts, an input methodology (based on total estimated labour hours and total estimated costs to deliver the contract) is used. Each month an assessment is undertaken on a contract-by-contract basis of work in progress in respect of both the supply of individual components and the labour hours allocated to each project. These costs incurred are assessed against the total estimated costs to complete all contractual, performance obligations under each contract. This assessment enables both the stage of completion and profitability of the contract to be estimated. This estimate is subject to a level of uncertainty as it is not always possible to anticipate the impact of market factors on the total project cost. The aggregate transaction price allocated to partially satisfied and unsatisfied performance obligations under open contracts with customers as at the balance sheet date is set out in Note 6.

Audit Committee
continued

The Audit Committee concurs with the assessment made by management that the Group's revenue for those contracts, as presented, is materially accurate.

→ **Additional disclosure in relation to key sources of estimation uncertainty and critical accounting judgements is provided in the Group financial statements – note 4 on pages 88 and 89**

Key activities

In discharging its responsibilities, the Committee has completed the following activities:

+ Reviewed the Annual Report, financial statements and the half-yearly financial results including disclosures made therein, and confirms that taken as a whole, they are fair, balanced and understandable, and provide the information necessary for shareholders to assess the position, performance, strategy, and business model of the Company
+ Reviewed Going Concern and Viability Statements and supporting assessments
+ Reviewed reports from the external auditor on their work and findings
+ Reviewed the effectiveness of the Group's internal control environment
+ Reviewed the accounting policies in preparation for the 2024 accounts
+ Reviewed the accounting papers and reviews prepared as part of the half-yearly and full year results processes

Internal controls and compliance

To assist the Board with its responsibilities to effectively determine the nature and extent of the Group's significant risks (as described on pages 13 to 19, the Committee carries out a robust annual assessment of the principal risks and uncertainties facing the Group.

The Board remains ultimately responsible for determining the nature and extent of the effectiveness of the risk management and internal controls systems which mitigate potential impacts on shareholder investments and the Company's assets. The Corporate Risk Register is reviewed and challenged biannually by the Audit Committee.

The Committee having performed the annual review of the Group's internal control processes considers the systems to be effective and in accordance with the Guidance on Risk Management, Internal Control and Related Financial and Business Reporting as issued by the FRC. In order to support the growth of the business and the implementation of Company strategies, the Committee recognises the need to continue to review the adequacy and effectiveness of our control framework.

The Committee undertakes this evaluation having:

+ Reviewed the internal financial controls and risk management systems
+ Reviewed fraud detection and the systems and controls for the prevention of bribery including employee confirmation of abiding by the Code of Conduct, Anti-bribery & Corruption, and Whistleblowing policies

In line with the provisions of the UK Corporate Governance Code, the Committee monitors and reviews the effectiveness of the Company's internal audit function or, where there is not one during a period, considers annually whether there is a need for one.

The Committee remains of the view that the statement made regarding the Company's viability period continues to be an accurate assessment of the Company's viability as at the date of the report. The Viability Statement can be found in full on pages 42 and 43.

External audit

The Audit Committee provided a forum for reporting and discussion with the Group's external auditor in respect of the Group's full-year results.

The Committee dedicated time for these activities and reviewed the audit work with emphasis on significant risk areas identified and discussed by the external auditor in their report.

The scope of the audit work to be undertaken by the auditor was reviewed and agreed on 18 December 2024.

The Committee agreed the fees to be paid to the external auditor relating to their services rendered for the annual audit.

The independence and objectivity of the external auditor was assessed by the Committee.

The Chairman of the Audit Committee will be available at the AGM to answer any questions about the work of the Committee.

External auditor

PKF Littlejohn LLP was appointed as the Company's auditor in August 2023 after a competitive tender. Daniel Hutson is the senior statutory auditor. The Committee has met with the auditor on at least three occasions during the year and it is expected that the Committee will continue to meet with the auditor a minimum of two times each year. The Chief Executive Officer and Chief Financial Officer, and other relevant managers and Board members, may attend these sessions by invitation, except for a period of each meeting where the Committee members may meet with the auditor without any member of executive management present.

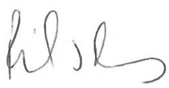
The Committee is required to assess the qualifications, expertise, resources, and independence of the external auditor, and the objectivity and effectiveness of the audit process. The Committee reviews the type of work, effectiveness of, and level of fees charged by the auditor on an annual basis and recommends to the Board the appointment, reappointment, term, remuneration, and terms of engagement of the external auditor.

The Committee safeguards auditor objectivity and independence through maintaining a dialogue with the auditor and by monitoring all fees paid. It is the policy of the Group not to engage the statutory auditor in any non-audit related services. This includes tax services. Specifically, the policy states that the preparation of tax forms, payroll tax, calculation of indirect tax and the provision of tax advice cannot be provided by the statutory auditor.

Note 7 to the consolidated financial statements includes disclosure of the auditor's remuneration during the year. The Committee, taking into consideration relevant UK professional and regulatory requirements, regularly considers the independence and objectivity of the auditor. The Committee receives an annual statement from the auditor detailing their independence policies and safeguards, and confirming their independence, taking into account relevant ethical guidance regarding the provision of non-audit services by the external auditor. The Committee considers the effectiveness of the external audit and the Group's relationship with the external auditor on an ongoing basis. In completing the review of the effectiveness of the annual audit in 2024 the Committee was able to conclude the audit undertaken by PKF Littlejohn LLP was effective. This review consisted of considering a number of key points together with the senior financial management of the Group. A similar exercise will be undertaken following completion of audit procedures on the 2024 results and reported on in next year's annual report.

Review of the Audit Committee's effectiveness

The Committee has reviewed and considered the effectiveness of its performance during the year. The review included the views of members of the Committee and of regular attendees at the various meetings (including the Executive Directors). No significant matters of concern were identified. I am satisfied that the degree of rigour and challenge applied in performing the Committee's responsibilities is appropriate and effective.



Richard Amos
Chair of the Audit Committee

24 March 2025

Nomination Committee

The Nomination Committee is appointed by the Board from the Non-Executive Directors of the Company and the Chief Executive Officer. The Chair of the Committee is Andrew Herbert.

The Committee met five times during 2024. When specific issues or changes need to be addressed, such as the appointment of a new Board member, the Committee may meet on additional occasions on the request of any member of the Committee. Please see the tables on page 51 for details of the Committee members in the year and the number of Committee meetings attended.

Responsibilities

The Nomination Committee's main responsibilities, as outlined in its terms of reference, are:

+ Reviewing the size, structure, composition and independence of the Board and its Committees
+ Identifying and nominating candidates to fill Board vacancies as the need arises
+ Ensuring adequate succession planning is in place for Executive Directors, Non-Executive Directors and members of the senior management team
+ Making recommendations to the Board on the appointment of new Executive and Non-Executive Directors and their reappointment following retirement by rotation
+ Reviewing the results of the annual Board performance evaluation process.

The Committee Chair will not chair the Committee when it deals with the appointment of a successor to that role. The Committee shall review its terms of reference annually and may recommend to the Board any amendments. The terms of reference of the Committee are available on written request from the Company Secretary.

The Nomination Committee's role in the composition, succession and evaluation of the Board is disclosed in the Corporate Governance statement.

Boardroom diversity

The Committee is committed to ensuring that recruitment and promotion of individuals throughout the Group, including those at Board and senior management level, always consider relevant skills, experience, knowledge and ability without gender or ethnicity bias. Succession planning is performed and all appointments are made on merit and suitability against objective selection criteria with due consideration of, amongst other things, the benefits of diversity, including gender and ethnicity. Details of the workforce split by gender are set out on page 28.

The Board approved a Diversity Policy in respect of its membership in February 2023. It is cognisant of the benefits of a rich mix of backgrounds, experience and skills. The present Board is 29% female versus 71% male (two females and five males). The Board has not set any measurable objectives in respect of a diversity quota but appointments made to the Board in the past five years have demonstrated our inclusive approach, which the Nomination Committee expects to maintain for any and all future appointments.

Further disclosure of information in respect of diversity and equal opportunities policies for the Group is in the Sustainable and Responsible Business Report on pages 21 and 22.

Key issues and activities

During the year, the Nomination Committee oversaw the recruitment of a new independent non-executive director and Chair of the Remuneration Committee to replace Alison Littley who resigned on 30 June 2024. Rockwell Search was engaged to undertake the search and following a comprehensive selection process, Dr Inken Braunschmidt was appointed on 1 June 2024 and succeeded Alison Littley as Chair of the Remuneration Committee on 1 July 2024.

Korn Ferry was appointed to assist with the recruitment of an Interim CFO following Ian Tichias's resignation from the Board. Paul James was appointed as Interim CFO on 20 November 2024. Korn Ferry was also engaged to assist with the appointment of a permanent CFO. Following a competitive process, Paul James was appointed as the permanent CFO on 15 January 2025.

Other than in respect of recruitment services, Rockwell Search and Korn Ferry have no other connection with the Company or any of its Directors.

In February 2024, the Committee reviewed and considered the terms of the appointment of Stuart Widdowson as an Non-Executive Director.

A summary of the key terms of the Relationship Agreement is set out below:

+ Xaar has granted Odyssean the right to appoint Mr Widdowson to be a Director of the Company for appointment to the Board (the 'Nominated Director') for so long as Odyssean has the right to exercise at least 10% or more of the Company's ordinary shares or voting rights attaching to the ordinary shares;
+ Odyssean undertakes to, inter alia: (1) conduct all transactions and relationships with any member of Xaar's Group on an arm's length basis;

Nomination Committee continued

Key issues and activities continued

- (2) not take any action which would have the effect of preventing Xaar or any member of Xaar's Group from carrying on business independently of Odyssean or its associates;
- (3) not influence the day-to-day running of the Company (save through Mr Widdowson's role as the Nominated Director) and
- (4) not vote to prevent Xaar being managed in accordance with the principles of good governance set out in the UK

  Corporate Governance Code; and
- the Relationship Agreement will terminate (1) on the date upon which Odyssean ceases to hold at least 10% of the ordinary shares of the Company or the voting rights attaching to the ordinary shares of the Company; (2) on six months' notice written notice by either party at any time or immediately upon written notice in the event of a material breach of the Relationship Agreement; or (3) in the event that the Company's ordinary shares cease to be listed on the Official List or another recognised UK stock exchange.

The Committee has considered organisational development and succession planning, Board diversity, and, in association with the Remuneration Committee, has worked alongside executive management in reviewing senior management development.

The Committee has facilitated the review of the annual performance evaluations of the Board and its Committees. For further information with regards to the evaluation, see the Corporate Governance statement. As the Company is not a member of the FTSE 350, it is not required by the UK Corporate Governance Code to have regular externally facilitated Board evaluations, however the Committee will consider the use of an external evaluator for future annual performance evaluations.

Induction

On appointment to the Board, the Non-Executive Directors were given a thorough induction on the Group which involves meeting with members of the senior management team with responsibility for operational and functional areas. Directors visited the Group's assets and meet with local management to gain important insights into the business and the strategy. Moreover, Directors are invited to meet with key external advisors to the Board to gain wider perspectives on Xaar and its sector.

Board appointments

The process adopted by the Committee in respect of any appointment to the Board is, firstly, to identify the specific skills and experience sought and then, secondly, to conduct a search to determine whether any external individuals known to the Committee or internal candidates would be suitable for the role. If no compelling candidates can be identified through this process then an external search consultancy is engaged. Even if a suitable internal candidate exists, an external mapping process may be used.

Members of the Committee and other Executive and Non-Executive Directors interview short-listed candidates, as the Committee deems appropriate. Upon identifying a suitable candidate, the Chair of the Nomination Committee will recommend to the Board that the Company makes a formal offer of employment to the candidate.

As part of the recruitment process the Committee ensures appropriate disclosure of other demands on Directors' time. The Board of Directors' profiles disclose any external appointments, see page 35. No Executive Directors have non-executive roles, or other significant appointment. All Directors are required to submit themselves for reappointment every year at the AGM.

Review of the Nomination Committee's effectiveness

The Committee has reviewed and considered the effectiveness of its performance during the year. The review included the views of members of the Committee and of regular attendees at the various meetings (including the Executive Directors).

I am satisfied that the degree of rigour and challenge applied in performing the Committee's responsibilities is appropriate and effective.

Andrew Herbert
Chair of the Nomination Committee
24 March 2025

Directors' Remuneration report

Statement from the Chair of the Remuneration Committee

Dear Shareholder

On behalf of the Board, I am pleased to present the Directors' Remuneration report for 2024, the first since my appointment to the Board on 1 June 2024 and as Chair of the Committee on 1 July 2024. Following my statement, the Annual Report on Remuneration sets out how we implemented the Remuneration Policy in 2024 and how we propose to implement it in 2025. The Annual Report on Remuneration will be the subject of an advisory shareholder vote at the 2025 AGM.

Remuneration in the context of our business performance and our approach to wider workforce remuneration

I have described below, with the detail later in the report, how the performance in the year and across the last three years is reflected in the outturns for the 2024 annual bonus and 2022 LTIP awards respectively.

For 2024 we have again implemented a tiered pay increase, ranging from an 8% base salary increase for our most junior employees and cascading down to 2.5% for our senior employees, including the Executive Directors. This results in our UK starting base salary for production operatives continuing to be at a premium to the National Living Wage rate effective from April 2024. Our people are at the heart of our business, and we were delighted that during 2023 we gained full accreditation for the Great Place To Work certification. This was especially pleasing as it was gained on our first application and is testament to the hard work and engagement of colleagues across the business.

Executive Director changes

As announced on 20 November 2024, Ian Tichias resigned as CFO on that date to pursue other opportunities. His remuneration to that date is included in the single figure table later in this report. Information on other payments made to him are set out later in this report. Ian Tichias' bonus opportunity in respect of 2024 lapsed when he left the business. In line with the Directors' Remuneration Policy and the terms of both the Long Term Incentive Plan and the Deferred Bonus Plan, his existing awards under that plan were retained subject to the Rules of the Plan, and will vest at the originally anticipated dates subject to the satisfaction of the relevant performance conditions and Good Leaver proration (if applicable).

Paul James was appointed as Interim CFO and Executive Director on 20 November 2024 and as permanent CFO on 15 January 2025. His remuneration earned as Interim CFO is included in the single figure table later in this report. His remuneration package as permanent CFO was set as described below, with all elements in line with the Policy approved at the 2023 AGM.

+ A base salary of £300,000, taking into account his experience and appropriate market benchmarks.
+ Pension (or a cash supplement) at the level of 6% of salary, in line with the wider workforce.
+ An annual bonus opportunity of 110% of salary.
+ An annual LTIP grant of 125% of salary.

Annual bonus and LTIP outturns for the year ended 31 December 2024

2024 Annual bonus

For the financial year ended 31 December 2024, the CEO was eligible for an annual bonus of up to 125% of base salary. At the start of the year annual bonus targets were set based on performance measures against adjusted group profit before tax and cash generated from operations.

Achievement against both the Group profit before tax and Cash generated from operations targets were below threshold and therefore the annual bonus lapsed in full. Full details of the targets and performance achieved can be found on page 60.

As noted above, Ian Tichias, the former CFO's bonus opportunity for 2024 lapsed when he left the business.

Paul James, the current CFO is not eligible to earn a bonus in respect of 2024.

Long-Term Incentive Plan (LTIP) awards vesting in respect of 2024

John Mills and Ian Tichias were granted LTIP awards over 207,932 and 92,414 shares respectively on 6 April 2022. The awards were based 60% on Cumulative Adjusted EPS for the three-year period ending 31 December 2024 and 40% on relative TSR performance against the companies in the FTSE SmallCap Index measured over the same period. The EPS Target was achieved to 63.75% however Xaar's relative TSR performance over the performance period was below the median level and therefore these awards vested at an overall 38.25% in accordance with the EPS Target. The balance of this award lapsed. When considering the outturn for the LTIP granted in 2022, the Committee has taken a holistic view, including in relation to the employee and wider stakeholder experience, in addition to performance relative to the targets and objectives set. The outturn of the EPS element reflects the cumulative performance over the last three years. As noted above, there was no annual bonus payable for 2024. Therefore, in the round the Committee believes the incentive outcomes in respect of 2024 are an appropriate reflection of wider performance and the Committee has not exercised any discretion in relation to formulaic remuneration outcomes.

LTIP awards granted in 2024

The 2024 LTIP awards were granted at 150% of base salary for the CEO and 100% of salary for the former CFO.

The awards are based on Cumulative Adjusted Profit before Tax performance (40% of the award) and relative TSR performance against the companies in the FTSE SmallCap Index (40% of the award) and Cumulative Revenue (20%). All measures will be measured over a three-year performance period to 31 December 2026. Each award will be subject to a further two-year holding period following the end of the performance period.

Directors' Remuneration Policy

Our current Directors' Remuneration Policy was approved by shareholders at the AGM held on 31 May 2023 with over 97% of votes in favour and will continue to apply in 2025. The full Policy is included in the Directors' Remuneration report for the year ended 31 December 2022 which is included in the Annual Report and Accounts for that year, which is available on the Company's website.

Directors' Remuneration report
continued

In line with the usual timetable, it is expected that shareholders will be asked to approve a new Policy at the 2026 AGM. During 2025, we will review the Policy to consider whether it remains fit for purpose, supports the strategy of the Group, and is aligned with stakeholder interests. We will engage with shareholders in relation to our proposals before submitting a new Policy for approval at the 2026 AGM.

Implementation of the Policy in 2025

A summary of our approach to pay increases for the wider workforce for 2025 is set out above.

For 2025, John Mills' salary has been increased by 2.5% in line with the lowest rate of increases awarded to the wider workforce.

	Salary Effective from 1 January 2024	Salary Effective from 1 January 2025
CEO – John Mills	£399,750	£409,753
CFO – Paul James[1]	–	£300,000[2]

1 Paul James was appointed as Interim CFO and Executive Director effective 20 November 2024. For the period to 31 December 2024 he received £74,749.
2 Paul James' base salary was set at £300,000 on appointment as permanent CFO on 15 January 2025. For the period from 1 January 2025 to 14 January 2025, he received £22,043 in interim contractor fees.

No other changes are proposed to the CEO's package for 2025. The CFO's package was set on his appointment with effect from 15 January 2025 as detailed below and on page 60.

+ Pension/cash in lieu – in line with wider workforce (currently 6% of salary)
+ Maximum annual bonus for 2025 is 125% of salary for the CEO and 110% for the CFO. 30% of any bonus will be deferred in shares and subject to a two-year deferral period. The balance is delivered in cash. Further information in relation to the performance measures is set out on page 67
+ Long-term incentive: maximum 150% of salary for the CEO and 125% of salary for the CFO. LTIP awards vest after three years subject to the achievement of appropriately stretching performance conditions. A further two-year holding period applies in line with the UK Code. Further information in relation to the performance measures is set out on page 67
+ The Committee retains discretion to override formulaic outcomes if these do not reflect underlying Company performance or other circumstances as determined by the Committee. As part of this assessment the Committee will take into account progress against Xaar's ESG Roadmap that will push Xaar towards its Net Zero and our wider ESG commitments.

Looking ahead – key focus areas for the Committee for 2025

During the course of 2025 we will continue the implementation of the reward policy including suitable bonus targets taking into consideration the wider workforce. As noted above, we will review the Policy to consider whether it remains fit for purpose, supports the strategy of the Group, and is aligned with stakeholder interests. We will engage with shareholders in relation to our proposals before submitting a new Policy for approval at the 2026 AGM.

Board Chair and Non-Executive Directors

Board Chairman

The Committee reviewed the Chairman's fee. It was agreed that the fee for 2025 would increase by 2.5%, increasing the Chairman's fee to £134,514. The base NED fee will be increased by 2.5%, in line with the lowest rate of increase for the wider workforce for 2025 to £51,402. The Committee considers that the fees are broadly in line with market practice

Non-Executive Directors

Under delegated authority from the Board, the Executive Directors and the Chair have reviewed fees for the other Non-Executive Directors. The outcome was that the base fee of £50,148 for the Non-Executive Directors' fees is broadly market competitive. The base fee will be increased by 2.5%, in line with the lowest rate of increase for the wider workforce for 2025 to £51,402. The additional fee in respect of acting as a Committee Chair or Senior Independent Director will not be increased, remaining at £7,500 and £3,000 respectively.

Employee engagement

As explained in the Annual Report last year, our workforce engagement sessions are held at least twice a year. These include regular business forums with Non-Executive Directors and senior management update calls to all employees. These have provided an upward channel for views, comments and debate, as well as an opportunity to provide positive feedback on the Group's focus on the wellbeing and health and safety of our employees.

Shareholder engagement

We remain committed to a responsible approach to executive pay, as I trust this Directors' Remuneration report demonstrates. We believe that the Policy operated as intended and consider that the remuneration received by the Executive Directors in respect of 2024 was appropriate, taking into account Group and personal performance and the experience of shareholders and employees. On behalf of the Board, I would like to thank you, our shareholders, for your engagement, and I hope that we will continue to receive your support at the forthcoming AGM on 28 May 2025.

Inken Braunschmidt
Chair of the Remuneration Committee
24 March 2025

Directors' Remuneration Policy

Introduction

Our Policy was approved by shareholders at the AGM held on 31 May 2023. As noted in the statement from the Committee Chair, the full Policy is included in the Annual Report for the year ended 31 December 2022, which is available on the Company's website at www.xaargroup.com/investor-centre/. The Company did not consult with employees when drawing up the Policy. We have set out below how the Remuneration Committee addresses the principles set out in the UK Corporate Governance Code 2018 in respect of the Directors' Remuneration Policy.

Annual Report on Remuneration

This part of the report sets out the actual payments made by the Company to its Directors with respect to the year ended 31 December 2024. The information provided in this part of the Directors' Remuneration report is subject to audit.

Single figure table

The aggregate remuneration provided to Directors who have served as Directors in the year ended 31 December 2024 is set out below, along with the aggregate remuneration provided to such Directors for the financial year ended 31 December 2023.

Year ended 31 December 2024

	Salary/fees[a] £'0000	Benefits[b] £'000	Bonus[c] £'000	Long-term incentives[d] £'000	Pension[e] £'000	Loss of office £'000	Total remuneration £'000	Total fixed remuneration £'000	Total variable remuneration £'000
Executive									
John Mills	400	33	0	67	24	–	524	457	67
Ian Tichias[1]	236	23	0	26	14	306	605	579	26
Paul James[2]	75	–	–	–	–	–	75	75	–
Non-Executive									
Andrew Herbert (Chairman)	131	–	–	–	–	–	131	131	–
Alison Littley[3]	30	–	–	–	–	–	30	30	–
Richard Amos	59	–	–	–	–	–	59	59	–
Jacqueline Sutton	50	–	–	–	–	–	50	50	–
Stuart Widdowson[4]	43	–	–	–	–	–	43	43	–
Inken Braunschmidt[5]	33	–	–	–	–	–	33	33	–

1 Ian Tichias stepped down from the Board on 20 November 2024. He received a payment for loss of office of 12 months' salary and benefits in accordance with the terms of his contract.
2 Paul James joined the Board on 20 November 2024 as the Interim CFO. From 20 November 2024 to 14 January 2025, he received a gross daily fee equivalent to £2,200. The fees in the table above includes the total fees charged by the headhunter.
3 Alison Littley stepped down from the Board on 30 June 2024.
4 Stuart Widdowson joined the Board on 27 February 2024.
5 Inken Braunschmidt joined the Board on 1 June 2024.

Year ended 31 December 2023

	Salary/fees[a] £'0000	Benefits[b] £'000	Bonus[c] £'000	Long-term incentives[d] £'000	Pension[e] £'000	Total remuneration £'000	Total fixed remuneration £'000	Total variable remuneration £'000
Executive								
John Mills	390	32	–	180	23	625	445	180
Ian Tichias	260	25	–	84	16	385	301	84
Non-Executive								
Andrew Herbert (Chairman)	130	–	–	–	–	130	130	–
Alison Littley	59	–	–	–	–	59	59	–
Chris Morgan[1]	48	–	–	–	–	48	48	–
Richard Amos[2]	33	–	–	–	–	33	33	–
Jacqueline Sutton[3]	8	–	–	–	–	8	8	–

1 Chris Morgan stepped down from the Board on 30 November 2023.
2 Richard Amos joined the Board on 1 June 2023.
3 Jacqueline Sutton joined the Board on 1 November 2023.

Directors' Remuneration report
continued

The figures in the single figure table above are derived from the following:

(a) Salary/fees	The amount of base salary/fees received in the year.
(b) Benefits	This is the taxable value of benefits and the flexible benefits allowance received in the year.
(c) Bonus	The value of the bonus earned in respect of the year, including the amount paid in cash and the amount deferred into shares.
(d) Long-term incentives	The value of LTIP awards vesting is in respect of performance periods which ended in the relevant year. The value of SAYE options granted is based on the fair value of the options/shares at grant. In the 2023 Directors' Remuneration Report, the long-term incentives values for the year ended 31 December 2023 were calculated in line with the applicable regulations by reference to the average share price over October, November and December 2023, being £1.53869. In line with the applicable regulations, these have now been updated to reflect the share price of £1.025 at the date of vesting.
(e) Pension	The value of the employer contribution to the defined contribution pension plan in the UK (or the value of a salary supplement paid in lieu of a contribution to this pension plan.

Individual elements of remuneration

Base salary, fees and service agreements

John Mills' salary was increased to £399,750 from 1 January 2024 and Ian Tichias' salary was increased to £266,500 from 1 January 2024.Paul James was appointed as the permanent CFO on a salary of £300,000 with effect from 15 January 2025. The Executive Directors are engaged under the terms of service agreements, which can be terminated with 12 months' notice, in accordance with the Directors' Remuneration Policy.

Benefits

UK benefits principally comprise a car allowance, private medical insurance and basic levels of other insurances (such as income protection cover). In addition, UK Executive Directors are provided with an allowance of 5% of base salary which they can apply to a range of benefits such as life insurance and critical illness insurance.

Pension

The Company operates a self-administered, defined contribution, HMRC approved pension scheme. Executive Directors participate in this scheme. In appropriate circumstances, Executive Directors may take a salary supplement instead of contributions into a pension plan. This salary supplement does not form part of salary for the purposes of calculating any other entitlement under the policy. Non-Executive Directors do not receive pension contributions.

Annual bonus

For the financial year ended 31 December 2024, the CEO was eligible for a maximum annual bonus of up to 125% of base salary. Annual bonus targets were set based on performance against adjusted Group profit before tax pre bonus and cash generated from operations. As set out on page 76, both the Group profit before tax and Cash generated from operations metrics lapsed in full. However, the targets set out below show the performance against them.

	Threshold (0% of maximum vests)	Target (50% of maximum vests)	Maximum (100% vesting)	Actual
Adjusted Group PBT (pre bonus)	1.3	6.1	9.7	0.3
Cash generated from operations	9.5	10.6	11.1	6
Overall outturn				0%

The 2024 annual bonus opportunity for Ian Tichias, the former CFO, lapsed when he left the business.

Paul James, the new CFO was not eligible to earn a bonus in respect of 2024.

Long-term incentives vesting in respect of 2024

The 2022 LTIP awards vested by reference to performance over the period ending 31 December 2024. In line with the applicable regulations, the estimated vesting value of those awards is included in the 2024 single total figure of remuneration. Details of the performance measures, the outturns against them, and the basis of the calculation of the values included in the single total figure of remuneration are set out below.

When considering the outturns the Committee has taken a holistic view, including in relation to the employee and wider stakeholder experience, in addition to performance relative to the targets and objectives set. The Committee believes that the outcomes are an appropriate reflection of wider performance and the Committee has not exercised any discretion in relation to formulaic remuneration outcomes.

Long-term incentives vesting in respect of 2024 continued

Award	Performance Condition	Threshold vesting (25%)	Maximum vesting	Performance outturn	Vesting percentage	Shares under award	Vested shares
2022 LTIP award	TSR (40% weighting)[1]	Median	Upper quartile	Below median	0%	83,172 (John Mills)	0 (John Mills)
						36,965 (Ian Tichias)	0 (Ian Tichias)
	EPS (60% weighting)	6.0	12.0	9.1	63.75%	124,760 (John Mills	79,533 (John Mills)
						55,449 (Ian Tichias)	31,420 (Ian Tichias)

1 Total shareholder return relative to the TSR of the companies constituting the FTSE SmallCap Index over the three-year performance period –1 January 2022 to 31 December 2024.

In the 2024 single total figure of remuneration, the value of these awards is calculated as follows:

Award	Vested shares	Value of vested shares [1]	Value of vested shares attributable to share price at grant of award[2]	Value of vested shares attributable to growth in shares price[3]
John Mills' 2022 LTIP award	79,533	£67,061	£206,547	£139,486
Ian Tichias' 2022 LTIP award	31,420	£26,493	£81,598	£55,105

1 In accordance with the applicable regulations, this is calculated by reference to the average share price over October, November and December 2024 being £0.8431875.
2 This is calculated by reference to the share price at the date of grant being £2.597.
3 This is calculated by reference to the difference between the price at the date of grant and the average share price over October, November and December 2024.

Long-term incentives and deferred bonuses awarded during the financial year

The table below outlines awards made under the LTIP to Executive Directors in 2024. Due to the 2023 annual bonus lapsing in full there were no DBP awards made to Executive Directors in 2024.

		Award basis	Performance condition	Number of shares	Vesting at threshold	Performance period	Vesting date
29 April 2024	John Mills	Performance Share Plan awards	TSR, aPBT & Revenue	509,596	25% of award	1 January 2024 to 31 December 2026	March 2027 (2026 Results)
29 April 2024	Ian Tichias	Performance Share Plan awards	TSR, aPBT & Revenue	226,487	25% of award	1 January 2024 to 31 December 2026	March 2027 (2026 Results)

1 The share price used to calculate the face value of the Performance Share Plan award 29 April 2024 was £1.1767 being the closing average share price on the three business days preceding the grant award date.

The 2024 LTIP grants were based on Cumulative Adjusted Profit before Tax performance for the three-year performance period commencing with the 2024 financial year (40% of the award), relative TSR performance against the companies in the FTSE SmallCap Index (40% of the award) measured over a three-year performance period commencing with the 2024 financial year and Cumulative Revenue (20% of the award) measured over a three-year performance period commencing with the 2024 financial year. In line with the UK Corporate Governance Code 2018, there is a further two-year holding period following the end of the performance period.

Given the turnaround position of the Company, the Board considers the performance targets for the LTIP awards granted in 2024 to be commercially sensitive information at this time but, as in past years, will fully disclose the exact measurements retrospectively. The portion of the awards based on TSR will vest subject to the satisfaction of the following performance conditions:

Company's TSR performance relative to the comparator group	Portion of the TSR element that vests
Median	25%
Between median and upper quartile	Pro-rata between 25% and 100%
Upper Quartile	100%

Directors' Remuneration report
continued

Shareholding guidelines and total shareholdings of Directors

Executive Directors are required to retain half of the after tax number of shares they acquire pursuant to the LTIP or deferred bonus until they have achieved a shareholding with a value of 200% of salary. The extent to which each Executive Director has met the shareholding guideline is shown in the table below.

Name	Shareholding guidelines	Current shareholdings % of salary	Type	Owned outright	Vested	Unvested: Subject to performance conditions	Unvested: Not subject to performance conditions	Total as at 31 December 2024 (or, if earlier, date of retirement from the Board)
Executive Directors								
John Mills	200% of salary	97%	Shares	130,295				1,956,551
			LTIP Options		177,623	1,042,708	541,087	
			DBP and SAYE Options		35,193		29,645	
Paul James	200% of salary	0%	Shares	N/A				N/A
			LTIP Options		–	–	–	–
			DBP and SAYE Options		–		–	–
Ian Tichias[1]	200% of salary	70%	Shares	50,000				597,422
			LTIP Options		50,000	202,461	252,174	
			DBP and SAYE Options		17,538		25,249	
Non-Executive Directors								
Andrew Herbert			Shares					100,000
Alison Littley[2]			Shares	–				–
Richard Amos			Shares	–				–
Jacqueline Sutton			Shares	–				–
Stuart Widdowson[3]			Shares	25,000				25,000
Inken Braunschmidt			Shares	–				–

1 The number of shares held by Ian Tichias is stated as at 20 November 2024, being the date on which he stepped down as an Executive Director.
2 The number of shares held by Alison Littley is stated as at 30 June 2024, being the date on which she stepped down as a Non-Executive Director.
3 Stuart Widdowson is appointed as a representative of Odyssean Capital LLP which has a holding of 13,175,000 shares.

Shares that count towards the guideline are those owned outright and the net of tax shares subject to DBP and LTIP awards for which the vesting of which is not subject to the satisfaction of any further performance condition. The shares are valued at closing price on 31 December 2024 (£0.71 or at 20 November in the case of Ian Tichias (£0.802) with the percentage of salary determined by reference to salaries at the relevant date (John Mills £399,750, Paul James £N/A, Ian Tichias £266,500).

There have been no changes in the current Directors' holdings in the share capital of the Company, as set out in the table above, between 31 December 2024 and 24 March 2025. Andrew Herbert, Richard Amos, Inken Braunschmidt, Jacqueline Sutton, Stuart Widdowson hold no options in the Company.

Outstanding Directors' share awards

The awards held by Executive Directors of the Company under the LTIP are shown below:

LTIP

The outstanding awards granted to each Executive Director of the Company under the Xaar plc 2017 LTIP are as follows. All options under the LTIP are nil-cost options such that no exercise price is payable.

Name	As at 1 January 2024	Granted during the year	Exercised during the year	Lapsed during the year	As at 31 December 2024 (or if earlier date of retirement from the Board)	Grant date	Share price at date of grant	Earliest date of exercise	Expiry date
John Mills	177,623	–	–	–	**177,623**	4 October 2019	£0.452	4 October 2022	4 October 2029
	365,000	–	–	–	**365,000**	4 June 2020	£0.59	4 June 2025	4 June 2030
	293,478	–	–	117,391	**176,087**	14 October 2021	£1.61	March 2026*	14 October 2031
	207,932	–	–	–	**207,932**	6 April 2022	£2.70	March 2027*	6 April 2032
	325,180	–	–	–	**325,180**	9 May 2023	£1.799	March 2028*	9 May 2033
	–	509,596	–	–	**509,596**	29 April 2024	£1.1767	March 2029*	29 April 2034
Total	1,369,213	509,596	–	117,391	**1,761,418**	–	–	–	–
Ian Tichias	50,000	–	–	–	**50,000**	29 April 2020	£0.41	29 April 2023	19 May 2025
	170,000	–	–	–	**170,000**	4 June 2020	£0.59	4 June 2025	4 December 2025
	136,957	–	–	54,783	**82,174**	14 October 2021	£1.61	March 2026*	September 2026
	92,414	–	–	10,268	**82,146**	6 April 2022	£2.70	March 2027*	September 2027
	144,524	–	–	68,247	**76,277**	9 May 2023	£1.799	March 2028*	September 2028
	–	226,487	–	182,448	**44,039**	29 April 2024	£1.1767	March 2029*	29 April 2034
Total	593,895	226,487	–	315,746	**504,636**	–	–	–	–

* The options vest on the dealing day following the announcement by the Company of its annual results or, if later, the date on which the Remuneration Committee determines whether the performance condition and any other condition has been satisfied (in whole or in part) and are exercisable two years after this date.

DBP

The outstanding awards granted to each Executive Director of the Company under the Xaar 2020 Deferred Bonus Plan are as follows. All options under the DBP are nil-cost options such that no exercise price is payable.

Name	As at 1 January 2024	Granted during the year	Exercised during the year	Lapsed during the year	As at 31 December 2024 (or if earlier date of retirement from the Board)	Grant date	Share price at date of grant	Earliest date of exercise	Expiry date
John Mills	23,249	–	–	–	**23,249**	14 October 2021	£1.61	March 2023*	14 October 2031]
	11,944	–	–	–	**11,944**	6 April 2022	£2.70	March 2024*	6 April 2032
	29,645	–	–	–	**29,645**	9 May 2023	£1.799	March 2025*	9 May 2033
Total	64,838	–	–	–	**64,838**				
Ian Tichias	10,849	–	–	–	**10,849**	14 October 2021	£1.61	March 2023*	19 May 2025
	6,689	–	–	–	**6,689**	6 April 2022	£2.70	March 2024*	19 May 2025
Total	15,811	–	–	–	**15,811**	9 May 2023	£1.799	March 2025*	September 2025

* The options vest on the dealing day following the announcement by the Company of its annual results.

Directors' Remuneration report
continued

Shareholding guidelines and total shareholdings of Directors continued

All employee share plan

The Executive Directors may participate in the Company's all employee share plan, the Xaar plc SAYE Scheme (SAYE Scheme), on the same basis as other employees. The SAYE Scheme provides an opportunity to save a set monthly amount (up to £500) over three years towards the exercise of a discounted share option, which is granted at the start of the three years. Options and awards are not subject to performance conditions.

The outstanding awards granted to each Executive Director under the SAYE Scheme are as follows:

Name	As at 1 January 2024	Granted during the year	Exercised during the year	Lapsed during the year	As at 31 December 2024 (or if earlier date of retirement from the Board)	Grant date	Share price at date of grant	Earliest date of exercise	Expiry date
John Mills	5,294	–	5,249	–	**0**	2 November 2020	£1.02	1 December 2023	2 May 2024
Ian Tichias	5,581	–	–	–	**5,581**	4 November 2021	£1.29	1 December 2024	4 May 2025
	3,857	–	–	–	**3,857**	3 November 2022	£1.40	1 December 2025	3 May 2025
	9,438	–	–	–	**9,438**				

Payments for loss of office and payments to past Directors made during the year

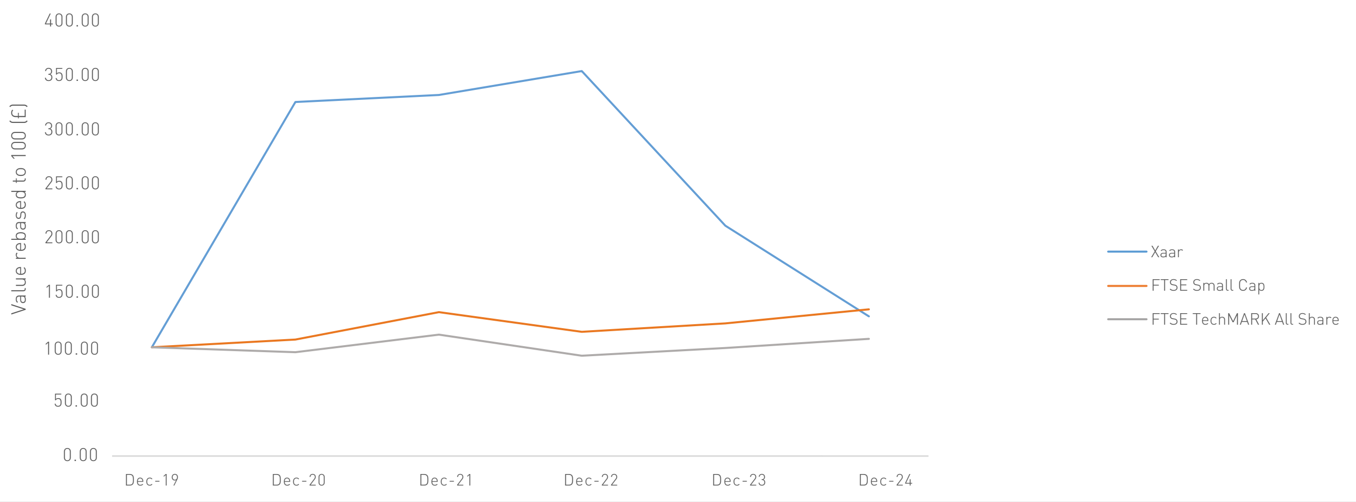
Ian Tichias stepped down from the Board with effect from 20 November 2024 and left the Company on the same date. His remuneration earned up to that date is included in the single figure of remuneration table. Following that date, Ian Tichias received a payment in lieu of notice of £262,500 and the value of benefits of £43,255 in line with contractual entitlement. Ian Tichias was treated as a good leaver and therefore retained, subject to performance testing and time pro-rating for his time in office, his LTIP awards as shown in the table on page 63.

The information provided in this part of the Directors' Remuneration report is not subject to audit.

Performance graph and table

The graph on this page shows the Company's performance measured by total shareholder return (TSR), compared with the performance of the FTSE TechMARK All Share Index and FTSE SmallCap Index of which Xaar is a member, which the Remuneration Committee considers to be the most appropriate indices for comparison because they illustrate the Company's TSR performance against a broad equity market index of similar UK companies.

Total shareholder return



This graph shows the value, by 31 December 2024, of £100 invested in Xaar on 31 December 2014, compared with the value of £100 invested in the FTSE TechMARK All Share and FTSE SmallCap Indices on the same date on a yearly basis. The other points plotted are the values at intervening financial year-ends.

The table below shows details of the total remuneration, annual bonus (as a percentage of maximum opportunity) and LTIP vesting percentage for the Chief Executive Officer over the last ten financial years.

	Total remuneration	Annual bonus as a % of maximum opportunity	LTIP as a % of maximum opportunity
Year ended 31 December 2024	524	0%	38.25%
Year ended 31 December 2023	625	0%	60%
Year ended 31 December 2022	1,592	39.51%	99.50%
Year ended 31 December 2021	454	26.26%	n/a
Year ended 31 December 2020	511	43.27%	n/a
Year ended 31 December 2019 – John Mills[1]	122	0%	0%
Year ended 31 December 2019 – Doug Edwards[2]	357	0%	0%
Year ended 31 December 2018	502	12%	0%
Year ended 31 December 2017	594	0%	50%
Year ended 31 December 2016	429	12.5%	0%
Year ended 31 December 2015	571	48%	0%

1 John Mills did not earn a performance bonus in respect of 2019. He received a buy-out bonus to compensate him for loss of income to join Xaar.

2 Doug Edwards was CEO from 1 January until 10 October 2019, and John Mills was CEO from 11 October to 31 December 2019

Percentage change in Directors' remuneration

The table below shows the percentage change in each Director's salary/fees, benefits and bonus and average remuneration of full-time employees on a full-time equivalent basis between the year ended 31 December 2023 and the year ended 31 December 2024 (in addition to the changes between prior years as required by the regulations – notes in relation to the data for prior years are included in prior Directors' Remuneration Reports), and the average percentage change in the same remuneration over the same period in respect of the employees of Xaar plc on a full-time equivalent basis. For the purposes of the table below, and in line with the regulations, the comparator employee group average employee within the UK is the employees of Xaar plc. This comparator group was chosen because it is the most relevant sub-set of employees and can be used consistently.

Alison Littley and Ian Tichias stepped down from the Board during the year; to enable a meaningful comparison, their remuneration for 2024 has been annualised for the purposes of the table below.

Richard Amos and Jacqueline Sutton were appointed to the Board during 2023; to enable a meaningful comparison, their remuneration for 2023 has been annualised for the purposes of the table below. Mr Amos was appointed as Senior Independent Director on 1 July 2024 and received an additional fee from that date.

Stuart Widdowson, Inken Braunschmidt and Paul James were appointed to the Board during the year and, accordingly, have been excluded from the table below.

	Salary					
Year	**2024 (£)**	2023-2024 % Increase	2022-2023 % Increase	2021-2022 % increase	2020-2021 % increase	2019-2020 % increase
John Mills	**399,750**	2.5%	8.33%	14%	5%	–
Ian Tichias	**266,500**	2.5%	8.33%	9%	5%	–
Andrew Herbert	**131,223**	0.9%	8.33%	30%	15%	70%
Alison Littley	**60,648**	2.06%	2.46%	16%	3.9%	–
Richard Amos	**59,148**	7.48%	n/a	n/a	n/a	n/a
Jacqueline Sutton	**50,148**	2.5%	n/a	n/a	n/a	n/a
Comparator employee group	**96,363**	2.5%	4.70%	46%	11.20%	2.50%

Year	Benefits					
	2024 (£)	2023-2024 % Increase	2022-2023 % Increase	2021-2022 % increase	2020-2021 % increase	2019-2020 % increase
John Mills	**33,159**	2.5%	5.54%	9%	4%	–
Ian Tichias	**25,752**	2.5%	4.59%	4%	-36%	–
Andrew Herbert	**–**	-	–	–	–	–
Alison Littley	**–**	–	–	–	–	–
Richard Amos	**–**	–	n/a	n/a	n/a	n/a
Jacqueline Sutton	**–**	–	n/a	n/a	n/a	n/a
Comparator employee group	**14,415**	6.8%	1.03%	494%	10%	2.5%

Year	Bonus					
	2024 (£)	2023-2024 % Increase	2022-2023 % Increase	2021-2022 % increase	2020-2021 % increase	2019-2020 % increase
John Mills	**0**	0%	-100%	72%	-36%	-21%
Ian Tichias	**0**	0%	-100%	64%	-24%	–
Andrew Herbert	**–**	–	–	–	–	–
Alison Littley	**–**	–	–	–	–	–
Richard Amos	**–**	–	n/a	n/a	n/a	n/a
Jacqueline Sutton	**–**	–	n/a	n/a	n/a	n/a
Comparator employee group	**0**	0%	-100%	149%	5.8%	n/a

1 Average employee – Full-time equivalent median employee of Xaar plc. Benefits calculated as the cost of benefits provided by Xaar to all employees at no cost to each employee (life cover etc.) plus 5% flexible benefits allowance for Executive Directors, and 3% flexible benefits allowance for comparator employee and any car allowance where applicable.

CEO pay ratio

The following table sets out the ratio of the CEO's total remuneration in respect of FY24 (taken from the single figure table on page 59), to that of the 25th percentile, 50th percentile (i.e. the median) and the 75th percentile full-time equivalent (FTE) of the Group's UK employees. In line with the applicable regulations, the corresponding ratios for the previous years are also included.

Year	Method	25th percentile	Median pay ratio	75th percentile
2024	Option A	17:1	12:1	8:1
2023	Option A	26:1	20:1	12:1
2022	Option A	62:1	41:1	29:1
2021	Option A	16:1	11:1	7:1
2020	Option A	15:1	11:1	8:1
2019	Option A	17:1	12:1	8:1

The median and quartile figures have been determined based on Option A as this was stated in government guidance as the most statistically accurate method. Remuneration for other employees for the purposes of the calculations was as at 31 December in each year.

In line with the applicable regulations, we have set out below for the same employee percentiles (and for the CEO) their total remuneration in respect of 2022 and 2023 and the salary component of that remuneration.

Year	CEO total remuneration (salary component of total remuneration)	25th percentile employee (salary component of total remuneration)	Median employee (salary component of total remuneration)	75th percentile employee (salary component of total remuneration)
2024	£524k (£400k)	£31k (£28k)	£41k (£45k)	£61k (£56k)
2023	£625k (£390k)	£28k (£25k)	£36k (£33k)	£59k (£54k)
2022	£1,592k (£360k)	£26k (£24k)	£39k (£34k)	£56k (£51k)
2021	£454k (£315k)	£28k (£24k)	£43k (£34k)	£62k (£55k)
2020	£511k (£300k)	£33k (£29k)	£46k (£34k)	£64k (£50k)
2019	£479k (£338k)	£28k (£26k)	£39k (£33k)	£57k (£52k)

The Committee believes the median pay ratio is consistent with the pay, reward and progression policies for the UK employees taken as a whole.

Spend on pay

The table below sets out the Group's distributions to shareholders by way of dividends and total Group-wide expenditure on pay for all employees (including employer social security, pension contributions and share-based payments), as reported in the audited financial statements for the financial year ended 31 December 2024.

	2024 £'000	2023 £'000	Change %
Dividends paid to shareholders	**–**	–	0%
Group-wide expenditure on pay for all employees (note 10)	**25,210**	29,539	-15%

Implementation of Directors' Remuneration Policy for the financial year commencing 1 January 2025

Information on how the Company intends to implement the Policy for the financial year commencing 1 January 2025 Is set out in the statement from the Chairman of the Remuneration Committee and is summarised below.

Basic salary and fees

Details of the Executive Directors' salary arrangements and the Chairman and Non-Executive Directors' fee arrangements for 2025 are set out in the statement from the Chairman of the Committee.

Annual bonus

The maximum opportunity for the CEO and CFO will be 125% and 110% of base salary respectively for 2025. The performance metrics for the bonus for 2025 are adjusted Group profit before tax and cash generated from operations.

30% of any bonus earned will be deferred in shares and subject to a two-year deferral period. The Committee has discretion to amend formulaic outputs such that in addition to overall business performance, circumstances that were unexpected or unforeseen (or any other reasons at the discretion of the Committee) will be considered. As part of this assessment, the Committee will take into account progress against Xaar's Sustainability Roadmap that will push Xaar towards its Net Zero by 2030 goal and our wider ESG commitments.

The Board considers the Group profit and cash targets for 2025 to be matters that are commercially sensitive and should therefore remain confidential to the Company. They provide our competitors with insight into our business plans, expectations and our strategic actions.

However, the Remuneration Committee will disclose on a retrospective basis how the Company's performance relates to any annual bonus payments made.

Long-term incentives

The maximum LTIP award in 2025 will be capped at 150% of base salary for the CEO and 125% of salary for the CFO. The Committee currently intends to grant awards subject to TSR performance and other performance metrics which will be announced at the time of grant As for 2024, given the turnaround position of the Company, the Board considers the performance targets for the LTIP awards to be granted in 2025 to be commercially sensitive information at this time but, as in past years, will fully disclose the exact measurements retrospectively.

Consideration by the Directors of matters relating to Directors' remuneration

Membership

The Company has established a Remuneration Committee which is constituted in accordance with the recommendations of the UK Corporate Governance Code 2018. The terms of reference of the Remuneration Committee can be obtained by contacting the Company Secretary. Please see the tables on page 51 for details of the Committee members in the year and the number of Committee meetings attended.

The Remuneration Committee is currently chaired by Inken Braunschmidt, since 1 July 2024. The other members during the year ended 31 December 2024 were Andrew Herbert, Alison Littley (until she stepped down from the Board on 30 June 2024), Richard Amos and Jacqueline Sutton. All members of the Remuneration Committee are considered independent within the meaning of the UK Corporate Governance Code 2018.

Role and responsibilities of the Remuneration Committee

The Remuneration Committee's primary responsibilities are:

+ To make recommendations to the Board on the Group's policy for executive remuneration, and review the ongoing appropriateness and relevance of the policy taking into account workforce related pay and policies and the alignment of incentives and rewards with culture.
+ To determine, on behalf of the Board, the specific remuneration and other benefits of Executive Directors, senior management and the Company Secretary (including pension contributions, bonus arrangements, long-term incentives and service contracts).
+ To review the design of all share incentive plans and oversee any major changes in employee benefit structures.
+ To ensure appropriate stakeholder input into the work of the Committee with specific focus on employees through regular employee engagement.

The fees paid to the Non-Executive Directors are determined by the Chief Executive Officer and the Chairman. The fees paid to the Chairman are determined by the Chief Executive Officer and the Non-Executive Directors.

The members of the Remuneration Committee have no personal financial interest, other than as shareholders, in the matters to be decided, no actual or potential conflicts of interest arising from other directorships and no day-to-day operational responsibility within the Company. Executive Directors are not entitled to accept more than one non-executive directorship outside the Group.

Directors' Remuneration report
continued

Key issues and activities

The key activities of the Remuneration Committee during 2024 are shown below:

Remuneration Committee's key activities in 2024	
Executive Directors' and senior management remuneration	Assess 2023 bonus and LTIP outturns Approved the payment for loss of office to the former CFO (Ian Tichias) Finalise and approve 2024 bonus and LTIP targets Review update on market practice and corporate governance
Share incentive plans	Review eligibility for LTIP awards Approve grant of LTIP awards Approve grant of SAYE awards
Governance	Consider and approve the Annual Report on Remuneration
Wider workforce	Review proposed annual pay increases for the wider workforce. Review proposed bonus payments for the wider workforce. Agree improved processes for the Remuneration Committee to monitor wider workforce pay and policies

Advisors to the Remuneration Committee

The Remuneration Committee is assisted in its work by Xaar's human resources department. The Chief Executive Officer is consulted on the remuneration of those who report directly to him and also of other senior executives. No Executive Director or employee is present or takes part in discussions in respect of matters relating directly to their own remuneration.

During the financial year, the Committee received independent advice from Deloitte LLP, which was appointed by the Committee, in relation to the Committee's consideration of matters relating to Directors' remuneration. Deloitte LLP was appointed in 2019 following a formal tender process. Fees for advice provided to the Remuneration Committee during the year were £17,160. Fees were charged on a time and disbursements basis.

Deloitte LLP is a member of the Remuneration Consultants Group and voluntarily operates under its code of conduct in its dealing with the Remuneration Committee. The Remuneration Committee continued to review the appointment of Deloitte LLP and is satisfied that all advice received was objective and independent.

Deloitte also provide advice to the Company on the operation of its employee share plans.

Shareholder voting

The following table sets out actual voting in respect of the resolution to approve the Directors' Remuneration report for the year ended 31 December 2023 at the 2024 AGM and the Directors' Remuneration Policy at the 2023 AGM.

Number of votes	For (including discretion)	Against	Withheld
Directors' Remuneration report for the year ended 31 December 2023	58,832,825 (97.99%)	1,205,698 (2.01%)	1
Directors' Remuneration Policy	58,994,131 (97.62%)	1,441,100 (2.38%)	197

Approval

This report was approved by the Board on 24 March 2025 and signed on its behalf by:

Inken Braunschmidt
Chair of the Remuneration Committee

Directors' responsibilities statement

The Directors are responsible for preparing the Annual Report and the Financial Statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors are required to prepare the Group financial statements in accordance with UK-adopted International Accounting Standards and have also chosen to prepare the Parent Company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including Financial Reporting Standard 101 Reduced Disclosure Framework ('FRS 101'). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the Company and of the profit or loss of the Group for that period.

In preparing the Parent Company financial statements, the Directors are required to:

+ Select suitable accounting policies and then apply them consistently
+ Make judgements and accounting estimates that are reasonable and prudent
+ State whether applicable UK accounting requirements have been followed, subject to any material departures disclosed and explained in the financial statements
+ Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

In preparing the Group financial statements, International Accounting Standard 1 requires that Directors:

+ Select and apply accounting policies in accordance with IAS 8
+ Present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information
+ Provide additional disclosures when compliance with the specific requirements in UK adopted IAS are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance
+ Make an assessment of the Group's ability to continue as a going concern.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and the Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Under applicable law and regulations the Directors are also responsible for preparing a Strategic report, Directors' report, and Directors' Remuneration Report that comply with that law and those regulations.

Website publication

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Responsibility statement

The Directors confirm that to the best of their knowledge:

+ The Group and Company financial statements, prepared in accordance with the relevant financial reporting framework, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and Company and the undertakings included in the consolidation taken as a whole;
+ The Strategic report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
+ The Annual Report and Financial Statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's performance, business model and strategy.

→ **The Directors of Xaar plc are listed on page 35**

In the case of each director in office at the date the Directors' report is approved so far as the director is aware, there is no relevant audit information of which the Group's and Company's auditors are unaware; and they have taken all the steps that they ought to have taken as a director in order to make themselves aware of any relevant audit information and to establish that the Group and Company's auditors are aware of that information.

This responsibility statement was approved by the Board of Directors and is signed on its behalf by:

Andrew Herbert
Chairman
24 March 2025

Independent auditor's report
to the members of Xaar plc

Opinion

We have audited the financial statements of Xaar Plc (the 'parent company') and its subsidiaries (the 'group') for the year ended 31 December 2024 which comprise the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated and Parent Company Statements of Financial Position, the Consolidated and Parent Company Statements of Changes in Equity, the Consolidated Statement of Cash Flow and notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in the preparation of the group financial statements is applicable law and UK-adopted international accounting standards. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 Reduced Disclosure Framework (United Kingdom Generally Accepted Accounting Practice).

In our opinion:

+ the financial statements give a true and fair view of the state of the group's and of the parent company's affairs as at 31 December 2024 and of the group's loss for the year then ended;
+ the group financial statements have been properly prepared in accordance with UK-adopted international accounting standards;
+ the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practices; and
+ the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the group and parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Our evaluation of the directors' assessment of the group's and parent company's ability to continue to adopt the going concern basis of accounting included the following audit procedures:

+ Obtaining and documenting our understanding of the controls in place around the preparation of the going concern forecast and future plans for the group through discussions with management;
+ Obtaining management's assessment for going concern for period to 31 March 2026 and checking the mathematical accuracy of the cash flow forecasts and budgets prepared;
+ Comparing budgeted performance for the year ended 31 December 2024 against actuals to assess management's historical forecasting accuracy;
+ Comparing budgeted performance for the year ended 31 December 2024 against actuals to assess management's historical forecasting accuracy;
  + Performing sensitivity analysis on key inputs and assumptions to assess the headroom across the going concern period. Key inputs and assumptions included: (i) sales growth rates, (ii) long-term profitability/margins, (iii) levels of operating and capital expenditure, and (iv) cost-saving initiatives;
  + Assessing management's reverse stress testing performed and corresponding mitigating actions;
  + Assessing management's assumptions against external factors and market trends for appropriateness;
  + Agreeing the opening cash position at 1 March 2025 in the going concern forecast to the audited position as at 31 December 2024; and
  + Assessing the prospective accuracy of management's forecast in 2025 against post year-end bank statements and management accounts;
+ Reviewing the terms of revolving credit facility within the group to confirm the availability across the forecast period;
+ Assessing the associated covenants and conditions of the Revolving Credit Facility impact on the going concern basis preparation;
+ Undertaking a review of subsequent events on matters impacting the going concern assessment; and
+ Considering the adequacy of the disclosures and accounting policy in the financial statements.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's or parent company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In relation to the entities reporting on how they have applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the directors' statement in the financial statements about whether the director's considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Our application of materiality

The scope of our audit was influenced by our application of materiality. We set quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of audit procedures on the individual financial statement line items and disclosures, and evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

	Financial statements – group	Financial statements – parent company
Overall materiality	£430,000 (2023: £350,000)	£429,000 (2023: £349,000)
Basis for determining overall materiality	0.7% of revenue (2023: 0.5% of revenue)	1% of gross assets, capped at overall group materiality (2023: 1% of gross assets, capped at overall group materiality)
Rationale for the benchmark applied	The nature of the business activities and operations results in the group being revenue-driven, and revenue is considered to be a core driver of the overall business. Revenue is a key performance metric for internal reporting purposes by group management and is a key figure within the financial statements for users of the financial statements, shareholders and wider stakeholders. On this basis, revenue was determined to be an appropriate basis for determining overall materiality.	Considering the nature of the parent company, being a holding company for the entities within the group, gross assets was determined to be an appropriate basis for the calculation of the overall materiality, given the significant asset base as at 31 December 2024.
Performance materiality	£301,000 (2023: £210,000)	£300,000 (2023: £209,000)
Basis for determining performance materiality	70% of the group overall materiality (2023: 60% of the group overall materiality)	70% of the parent company overall materiality (2023: 60% of the parent company overall materiality)
Rationale for the benchmark applied	For determining the performance materiality, we have considered the following factors: + The level of significant judgements and estimates; + The risk assessment and aggregation of risk, and the effectiveness of controls; + The control environment and the group's financial reporting controls and processes; and + The stability of key management personnel.	

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the nature and extent of our testing of account balances, classes of transactions, and disclosures, for example in determining sample sizes.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £21,500 (2023: £17,500) for the audit of the group financial statements, and £21,450 (2023: £17,450) for the audit of the parent company financial statements as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

For each component in scope of the group audit, we allocated performance materiality to each entity based on their contribution to overall group revenue. The range of performance materiality allocated across the components was between £75,000 and £240,000 (2023: between £45,000 and £185,000).

Our approach to the audit

In designing our audit approach, we determined materiality and assessed risk of material misstatement in the financial statements. In particular, we looked at areas involving significant accounting estimates and judgements made by management, including revenue recognition, the carrying amount and recoverability of goodwill and intangible assets, the carrying value and recoverability of investments and intra-group receivables, and the valuation of contingent consideration. Procedures were then performed to address the risks identified and for the most significant assessed risks of misstatement, the procedures performed are outlined below in the key audit matters section of this report. We re-assessed the risks throughout the audit process and concluded that the scope remained in line with that determined at the planning stage of the audit.

An audit was performed on the financial information of the group's significant operating components which, for the year ended 31 December 2024, were located in the United Kingdom (UK) and the United States of America (USA).

For management reporting purposes, the group is organised into four reportable business units – Printhead, Product Print Systems, Digital Imaging and Ink Supply Systems.

As a result of our materiality and risk assessments, we determined which components required a full scope audit of their financial information with consideration to their significance to the group based on their contribution to overall revenue, the presence of material classes of transactions and account balances, and other risk characteristics. On this basis, four components required a full scope audit of their financial information. Five components were subject to a specific scope audit whereby procedures were performed on one or more classes of transactions, account balances or disclosures. The remaining five components were not in scope due to the nature and conditions present in each component, and lack of material classes of transactions, account balances, and disclosures.

All components of the group were audited by us in our London, UK office. As group auditor, we performed an on-site visit of the full scope component located in Vermont, USA.

Independent auditor's report
continued

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our scope addressed this matter
Revenue recognition (note 6)	
Under ISA (UK) 240, there is a rebuttable presumption that revenue recognition is a significant fraud risk. Revenue is a key driver of the results of the group and therefore there is a perceived incentive to manipulate recognition to meet targets. We assess the risk in relation to the potential manipulation of the revenue recognised arises through manual journal entries and management override. There is also a significant judgment involved mainly around the recognition of revenue at a point in time or over time. Where the revenue is recognised over time (in the Engineered Printing Solutions component within the 'Product Print Systems CGU) on the long-term contracts crossing over the year end, there is significant estimation involved to establish how much of the performance obligation has been satisfied in the year and how much is recorded as a contract liability. An error in this balance could significantly affect users' interpretation of the financial statements. As a result, there is a risk of fraud or error relating to revenue recognition, meaning this is a significant risk and key audit matter for the year ended 31 December 2024.	In addition to the procedures required by ISA (UK) 240, our work on this key audit matter included: + Obtaining and documenting an understanding of the internal control environment in operation and undertaking walk-throughs to assess whether the key controls within the revenue processes and systems had been designed and implemented effectively in the year; + Reviewing the revenue recognition policy against the requirements under IFRS 15 Revenue from contracts with customers and assessing the adequacy of disclosures made within the financial statements; + Testing substantively a sample of point in time revenue transactions by agreeing to underlying supporting documentation, to ensure the occurrence and accuracy of revenue; + Testing substantively a sample of contract revenue by agreeing to underlying documentation, and challenging management on key estimates such as percentage of completion determined based on the input method, estimated costs to complete each project, reviewing the latest post year end estimates for costs to complete, discussing the status of projects with operations teams (outside the finance teams), and corroborating the status of projects with customer correspondence. + All material revenue journal entries posted during the preparation of the financial statements were investigated by agreeing to underlying documentation and through discussion with management to assess the appropriateness of the accounting treatment; + Reviewing contract asset and liability balances on a sample basis, reviewing the post-year end positions of the samples selected, and ensuring the balances have been appropriately recognised; and + Testing revenue cut-off by selecting samples from pre and post year-end revenue listings to ensure that the revenue was recognised in the correct period. Key observations Based on the audit procedures performed above, we did not identify any instances of management override and are satisfied that revenue has been recognised in accordance with the recognition criteria set out in IFRS 15. As a result of our challenges over the significant estimate around estimated costs to complete on the long-term projects, we identified adjustments which were subsequently corrected by the management.

Key audit matter

How our scope addressed this matter

Carrying amount and recoverability of goodwill and intangible assets (note 15)

Goodwill and intangible assets are material balances in the Consolidated Statement of Financial Position as at 31 December 2024.

Under IAS 36 Impairment of Assets, goodwill and other intangible assets with an indefinite useful life must be tested for impairment annually by comparing their carrying amounts with the recoverable amount. As at 31 December 2024, a goodwill balance of £7.0m (2023: £6.9m) is presented in the Consolidated Statement of Financial Position. This can be attributed to the following cash generating units (CGU) within the group:

CGU	£'m
Product Print Systems	5.6
Digital Imaging	0.7
Ink Delivery Systems	0.7

Management performs an impairment assessment by calculating the value-in-use (VIU) of each CGU. This requires the identification of future cash flows, extrapolated growth rates and an applicable discount rate.

Significant judgment and estimation is required in relation to future cash flows, estimated useful economic lives, and discount rates. All of which are inherently uncertain and could result in changing outcomes of the impairment test.

On this basis, carrying amount and recoverability of goodwill and other intangible assets was deemed to be a significant risk and a key audit matter for the year ended 31 December 2024.

Our work on this key audit matter included:

+ Obtaining and documenting an understanding of the relevant controls and procedures in place over the impairment of goodwill and other intangible assets;
+ Engaging a specialist to assess the appropriateness of the weighted average cost of capital (WACC) used in the VIU calculation;
+ Ensuring that all CGUs, or groups of CGUs, have been properly identified in accordance with IAS 36;
+ Reviewing management's impairment memorandum and model, and challenging management on the key inputs and assumptions underpinning the assessments. Assumptions were benchmarked against reliable external party sources, such as comparing long term growth rates to UK and US long term inflation;
+ Comparing forecasted performance with post year-end actuals in order to assess management's forecasting accuracy;
+ Reviewing the discounted cash flows for each CGU, performing downward sensitivity analysis on key inputs and estimates and assessing the corresponding VIU against the carrying value of the corporate assets; and
+ Assessing the adequacy of disclosures made in the financial statements in line with the requirements under UK-adopted international accounting standards.

Key observations

Based on the audit procedures performed, we are satisfied with management's assessment and conclusion that the customer relationship intangible asset in FFEI is written off in full.

We are also satisfied with management's assessment and conclusion that no impairment is required for goodwill and the remaining other intangible assets recognised within each CGU.

Valuation of contingent consideration (note 29)

Stratasys Solutions Limited completed the acquisition of the remaining 55% equity stake that Xaar 3D Holdings Limited held in Xaar 3D Limited on 6 October 2021. The purchase price consideration consisted of £9.3m paid in cash, an additional potential payment of up to USD21.2m based on specific milestones and a 3% earn-out consideration tied to Xaar 3D Limited's future revenues.

On the date of the transaction, the group recognised a financial asset of £10.9m, measured at fair value through profit and loss under IFRS 9 Financial Instruments, in relation to the contingent consideration. As at 31 December 2024, the fair value of the contingent consideration was £4.9m (2023: £10.6m). Management uses an external specialist to perform the Monte Carlo Simulation Model used in the valuation.

Determining the fair value of the contingent consideration is complex and involves significant judgments and estimates, with a key input being the forecast revenue generation from a third party. As such, there is a risk of material misstatement. Therefore, the valuation of contingent consideration is deemed a significant risk and a key audit matter.

Our work on this key audit matter included:

+ Obtaining and documenting an understanding of the method used by management's valuation expert to determine the fair value of the contingent consideration at the year-end;
+ Assessing management expert's competence, capability, and objectivity based on their qualifications and professional standards;
+ Using our internal valuations team as an audit specialist and assessing the appropriateness of the key inputs of the Monte Carlo Simulation model used by management's expert. This included a review of the methodology and reasonableness of assumptions, and calculating a point estimate;
+ Challenging management on the appropriateness and consistency of the forecasted revenue amounts provided by Stratasys Solutions Limited;
+ Recalculating the 3% earn-out consideration based on Xaar 3D Limited's reportable revenue within the relevant reporting periods;
+ Recalculating the year-end closing fair value movement recorded in the income statement and comparing this to management's calculation; and
+ Ensuring the adequacy and accuracy of the associated disclosures and that they were in line with the requirements of UK-adopted international accounting standards.

Key observations

As at the year ended 31 December 2024, a fair value loss of £5.6m was recognised on the contingent consideration financial asset, with the year-end balance being £4.9m.

Based on the audit procedures performed above, we are satisfied that the valuation methodology, key inputs, and assumptions therein to determine the fair value of the contingent consideration were reasonable, and in line with the requirements of UK-adopted international accounting standards.

Independent auditor's report continued

Other information

The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the annual report. Our opinion on the group and parent company financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

+ the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
+ the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the group and the parent company and their environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

+ adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
+ the parent company financial statements and the part of the directors' remuneration report to be audited are not in agreement with the accounting records and returns; or
+ certain disclosures of directors' remuneration specified by law are not made; or
+ we have not received all the information and explanations we require for our audit.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the group and parent company financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the group and parent company financial statements, the directors are responsible for assessing the group's and the parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

Corporate governance statement

We have reviewed the directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the group's and parent company's compliance with the provisions of the UK Corporate Governance Code specified for our review by the Listing Rules.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements or our knowledge obtained during the audit:

+ Directors' statement with regards the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 42;
+ Directors' explanation as to their assessment of the group's prospects, the period this assessment covers and why the period is appropriate set out on page 42;
+ Directors' statement on whether they have a reasonable expectation that the group will be able to continue in operation and meet its liabilities set out on page 42;
+ Directors' statement that they consider the annual report and the financial statements, taken as a whole, to be fair, balanced and understandable set out on page 69;
+ Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on page 14;
+ The section of the annual report that describes the review of effectiveness of risk management and internal control systems set out on page 14; and
+ The section describing the work of the Audit Committee set out on pages 52 to 54.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

+ We obtained an understanding of the group and parent company and the sector in which they operate to identify laws and regulations that could reasonably be expected to have a direct effect on the financial statements. We obtained our understanding in this regard through discussions with management, industry research, and experience of the sector.
+ We determined the principal laws and regulations relevant to the group and parent company in this regard to be those arising from:
  + The Companies Act 2006;
  + UK-adopted International Accounting Standards
  + United Kingdom General Accepted Accounting Practice
  + The UK Corporate Governance Code;
  + General Data Protection Regulation;
  + UK employment law;
  + US Federal Labor Standards Act;
  + Bribery Act 2010;
  + Serious Organised Crime and Police Act 2005;
  + Proceeds of Crime Act 2002;
  + Listing Rules;
  + Disclosure Guidance and Transparency Rules;
  + UK tax legislation; and
  + Tax legislation applicable in other jurisdictions.
+ We designed our audit procedures to ensure the audit team considered whether there were any indications of non-compliance by the group and parent company with those laws and regulations. These procedures included, but were not limited to:
  + Making enquiries of management in relation to known or suspected instances of non-compliance with laws and regulations;
  + Reviewing Regulatory News Service announcements;
  + Reviewing minutes from Board and other committee meetings; and
  + Reviewing legal expenditure nominal ledger accounts.
+ We also identified the risks of material misstatement of the financial statements due to fraud. We considered, in addition to the non-rebuttable presumption of a risk of fraud arising from management override of controls, that the potential for management bias was identified in relation to revenue recognition, the carrying amount and recoverability of goodwill and intangible assets, and the valuation of the contingent consideration. We addressed this by challenging the assumptions and judgements made by management when auditing these significant accounting estimates. Please refer to the Key Audit Matters section of our report for further information.
+ As in all of our audits, we addressed the risk of fraud arising from management override of controls by performing audit procedures which included, but were not limited to: the testing of journals; reviewing accounting estimates for evidence of bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

Because of the inherent limitations of an audit, there is a risk that we will not detect all irregularities, including those leading to a material misstatement in the financial statements or non-compliance with regulation. This risk increases the more that compliance with a law or regulation is removed from the events and transactions reflected in the financial statements, as we will be less likely to become aware of instances of non-compliance. The risk is also greater regarding irregularities occurring due to fraud rather than error, as fraud involves intentional concealment, forgery, collusion, omission or misrepresentation.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Other matters which we are required to address

We were appointed by the Audit Committee on 14 August 2023 to audit the financial statements for the period ending 31 December 2023 and subsequent financial periods. Our total uninterrupted period of engagement is two years, covering the periods ending 31 December 2023 to 31 December 2024.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to the group or the parent company and we remain independent of the group and the parent company in conducting our audit.

During the year, the Firm performed an ISRE 2410 interim review of consolidated financial information for the 6-month period ended 30 June 2024, which is a permitted, audit-related service.

Our audit opinion is consistent with the additional report to the Audit Committee.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone, other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Daniel Hutson
Senior Statutory Auditor
For and on behalf of PKF Littlejohn LLP
Statutory Auditor

15 Westferry Circus
Canary Wharf
London E14 4HD

24 March 2025

Consolidated income statement
for the year ended 31 December 2024

	Note	Year ended 31 December 2024			Year ended 31 December 2023 restated **		
		Adjusted £'000	Adjusting Items* £'000	Total £'000	Adjusted £'000	Adjusting Items* £'000	Total £'000
Revenue	6	**61,408**	**–**	**61,408**	70,241	–	70,241
Cost of sales		**(39,191)**	**–**	**(39,191)**	(43,350)	–	(43,350)
Gross profit		**22,217**	**–**	**22,217**	26,891	–	26,891
Research and development expenses	7	**(5,256)**	**228**	**(5,028)**	(5,642)	179	(5,463)
Selling, general and administrative expenses	7	**(16,294)**	**(11,959)**	**(28,253)**	(20,093)	(5,780)	(25,873)
Other income	8	**–**	**–**	**–**	2,201	–	2,201
Operating (loss) / profit		**667**	**(11,731)**	**(11,064)**	3,357	(5,601)	(2,244)
Finance income	11	**134**	**–**	**134**	89	–	89
Finance costs	11	**(495)**	**–**	**(495)**	(562)	–	(562)
(Loss) / profit before tax		**306**	**(11,731)**	**(11,425)**	2,884	(5,601)	(2,717)
Tax	12	**236**	**497**	**733**	(64)	373	309
(Loss) / profit for the year attributable to the equity shareholder of the parent		**542**	**(11,234)**	**(10,692)**	2,820	(5,228)	(2,408)
(Loss) / earnings per share							
Basic (loss) / earnings per share	13	**0.7**		**(13.5)**	3.6		(3.0)
Diluted (loss) / earnings per share	13	**0.7**		**(13.5)**	3.5		(3.0)

* Further information on adjusting items is included in Note 9.
** Refer to Note 32 for prior year restatement details.

Consolidated statement of comprehensive income
for the year ended 31 December 2024

	Year ended 31 December 2024	Year ended 31 December 2023 restated
Loss for the year attributable to the equity shareholders of the parent	**(10,692)**	(2,408)
Items that may be reclassified to the income statement in subsequent years		
Exchange gains / (losses) on translation of foreign operations	**122**	(308)
Other comprehensive expense for the year	**(10,570)**	(2,716)
Total comprehensive expense for the year	**(10,570)**	(2,716)

The Notes on pages 79 to 115 form part of these financial statements.

Consolidated statement of financial position
as at 31 December 2024

	Note	**31 December 2024 £'000**	31 December 2023 restated * £'000	31 December 2022 restated * £'000
Non-current assets				
Goodwill	15	**6,959**	6,873	7,163
Other intangible assets	16	**5,136**	7,366	8,681
Property, plant and equipment	17	**12,490**	14,529	16,104
Right-of-use assets	18	**4,734**	7,826	8,068
Deferred tax assets	19	**951**	580	753
Financial asset at fair value through profit or loss	29	**3,063**	8,277	11,089
Non-current financial assets	18	**104**	136	136
		33,437	45,587	51,994
Current assets				
Inventories	20	**27,236**	31,035	29,148
Trade and other receivables	21	**8,084**	8,802	10,027
Contract assets	22	**1,018**	2,156	1,500
Current tax receivable		**346**	306	735
Financial asset at fair value through profit or loss	29	**1,854**	2,322	517
Cash and cash equivalents		**8,711**	7,135	8,546
		47,249	51,756	50,473
Total assets		**80,686**	97,343	102,467
Current liabilities				
Trade and other payables	23	**(8,782)**	(9,568)	(13,216)
Deferred consideration	24	**–**	(2,115)	(1,646)
Provisions	25	**(951)**	(1,385)	(535)
Contract liabilities	22	**(1,986)**	(2,369)	(3,799)
Borrowings	26	**(557)**	(1,403)	(379)
Lease liabilities	18	**(1,218)**	(1,800)	(1,032)
		(13,494)	(18,640)	(20,607)
Net current assets		**33,755**	33,116	29,866
Non-current liabilities				
Lease liabilities	18	**(4,710)**	(6,898)	(7,800)
Provisions	25	**(300)**	(300)	(300)
Deferred consideration	24	**–**	–	(2,094)
		(5,010)	(7,198)	(10,194)
Total liabilities		**(18,504)**	(25,838)	(30,801)
Net assets		**62,182**	71,505	71,666
Equity				
Share capital	27	**7,948**	7,923	7,844
Share premium		**30,011**	29,950	29,427
Own shares	27	**(566)**	(566)	(775)
Translation reserve	27	**1,440**	1,318	1,626
Other reserves	27	**6,256**	6,256	6,256
Retained earnings	27	**17,093**	26,624	27,288
Total equity attributable to the equity shareholders of the parent		**62,182**	71,505	71,666

* Refer to Note 32 for prior year restatement details.

The Notes on pages 79 to 115 form part of these financial statements.

The consolidated financial statements on of Xaar Plc, registered number 3320972, were approved and authorised for issue by the Board of Directors on 24 March 2025 and signed on its behalf by:

Andrew Herbert
Chairman

24 March 2025

Consolidated statement of changes in equity

Year ended 31 December 2024

	Share capital £'000	Share premium account £'000	Own shares £'000	Translation reserve £'000	Other reserves £'000	Retained earnings £'000	Total equity £'000
Balance as at 1 January 2023	7,844	29,427	(775)	1,628	6,256	27,389	71,769
Correction of error (net of tax)	–	–	–	(2)	–	(101)	(103)
Balance as at 1 January 2023 restated *	7,844	29,427	(775)	1,626	6,256	27,288	71,666
Loss for the year restated	–	–	–	–	–	(2,408)	(2,408)
Other comprehensive income	–	–	–	(308)	–	–	(308)
Total comprehensive income	–	–	–	(308)	–	(2,408)	(2,716)
Issue of ordinary shares	79	523	–	–	–	–	602
Own shares disposed of on exercise of share options	–	–	209	–	–	–	209
Exercise of share options	–	–	–	–	–	(194)	(194)
Share-based payments	–	–	–	–	–	1,938	1,938
Balance as at 31 December 2023 restated *	7,923	29,950	(566)	1,318	6,256	26,624	71,505
Loss for the year	–	–	–	–	–	(10,692)	(10,692)
Other comprehensive income	–	–	–	122	–	–	122
Total comprehensive income	–	–	–	122	–	(10,692)	(10,570)
Issue of ordinary shares	25	61	–	–	–	–	86
Exercise of share options	–	–	–	–	–	(18)	(18)
Share-based payments	–	–	–	–	–	1,179	1,179
Balance as at 31 December 2024	**7,948**	**30,011**	**(566)**	**1,440**	**6,256**	**17,093**	**62,182**

* Refer to Note 32 for prior year restatement details.
Refer to Note 27 for details of the reserves.

The Notes on pages 79 to 115 form part of these financial statements.

Consolidated cash flow statement

as at 31 December 2024

	Note	31 December 2024 £'000	31 December 2023 £'000
Cash generated / (utilised) by operations	28	**5,993**	(1,537)
Net income taxes received		**605**	1,088
Net cash inflow / (outflow) from operating activities		**6,598**	(449)
Investing activities			
Interest income received		**134**	89
Purchases of property, plant and equipment	17	**(936)**	(1,510)
Proceeds from sale of property, plant and equipment	17	**–**	24
Purchases of intangible assets	16	**(86)**	(430)
Proceeds from sale of intangible assets		**–**	1,760
Cash earn-out received from financial assets at FVTPL	29	**120**	637
Net (outflow) / inflow from investing activities		**(768)**	570
Financing activities			
Proceeds from sale of own shares		**–**	15
Proceeds from issue of shares		**69**	602
Lease payments	18	**(1,197)**	(1,075)
Interest paid		**(87)**	(59)
Utilisation of revolving credit facility		**–**	1,700
Repayment of revolving credit facility		**–**	(1,700)
Net (outflows) / inflows from invoice discounting facility		**(941)**	915
Payment of deferred consideration		**(2,133)**	(1,746)
Net cash outflow from financing activities		**(4,289)**	(1,348)
Net increase / (decrease) in cash and cash equivalents		**1,541**	(1,227)
Cash and cash equivalents at beginning of the year		**7,135**	8,546
Effect of foreign exchange rates		**35**	(184)
Cash and cash equivalents at end of the year		**8,711**	7,135

The Notes on pages 79 to 115 form part of these financial statements.

Notes to the consolidated financial statements
for the year ended 31 December 2024

1. Presentation of the financial statements

a) General information
Xaar plc (the Company, and together with its subsidiaries, the Group) is a public limited company whose shares are listed on the London Stock Exchange, is incorporated and domiciled in the UK and is registered in England under the Companies Act 2006.

b) Basis of preparation
The consolidated financial statements have been prepared in accordance with UK-adopted International Accounting Standards and with the requirements of the Companies Act 2006.

The consolidated financial statements include the results of the Company and its subsidiaries (together 'the Group'). The Group's directly and indirectly held subsidiary undertakings are disclosed in note C6 to the company financial statements.

The consolidated financial statements have been presented in Sterling, the functional and presentational currency of the Company. Certain of the Group's subsidiary entities have functional currencies other than Sterling. The financial position and performance of all such subsidiary entities is translated into the presentational currency (Sterling) in accordance with the foreign currencies accounting policy as detailed in Note 2.

The consolidated financial statements have been prepared under the historical cost convention as modified for the revaluation of certain financial instruments. All values are rounded to the nearest thousand pounds (£'000) except when otherwise indicated.

c) Alternative performance measures
The alternative performance measures (APMs) used by the Group adjust for both recurring and non-recurring items that the Directors consider are not reflective of the underlying performance of the Group. Recurring items are adjusted each year irrespective of materiality to ensure consistent treatment.

The Directors believe that the 'adjusted profit before tax' and 'adjusted earnings per share' measures presented provide a consistent presentation of the Group's underlying operational performance. They also present shareholders with a clearer insight of performance metrics used by the Chief Operating Decision Maker and mitigate volatility for example resulting from exchange rate fluctuations, resulting from external factors that are not influenced by the Group.

These measures are not defined under IFRS; therefore, they may not be directly comparable with the 'adjusted' profit measures of other companies.

Adjusting items are defined as follows:

+ fair value gains or losses on financial assets at FVTPL;
+ restructuring and transaction expenses;
+ amortisation of intangible assets arising on business combinations;
+ foreign exchange gains or losses arising on intra-group transactions;
+ research and development expenditure credits;
+ share-based payments charges and employer's tax contributions thereon;
+ asset impairment outside of the ordinary course of business;
+ legal provisions; and
+ the tax effect of the aforementioned adjusting items.

d) Going Concern
The consolidated financial statements are prepared on a going concern basis. Having considered the Group's forecast financial performance and cash flows, and after making appropriate enquiries, the Directors have a reasonable expectation that the Group has adequate financial resources to continue in operational existence for the foreseeable future and for at least one year from the date that these consolidated financial statements are signed. For these reasons, they continue to adopt the going concern basis in preparing the consolidated financial statements. Accordingly, these financial statements do not include any adjustments to the carrying amount or classification of assets and liabilities that would result if the Group were unable to continue as a going concern.

In preparing forecasts Xaar considers all external factors that could impact on financial performance and makes appropriate allowances for these. The forecast informing the decision to prepare the consolidated financial statements on a going concern basis considered, among other things; the ongoing impact on sales to China due to local economic issues, the likelihood of inflationary pressures resulting from macro-economic factors, and the wars in Ukraine & Gaza. Furthermore, forecasts have been subject to sensitivities to assess the impact on revenue generation, profitability and liquidity of wider market disruption in certain customer and supplier markets and uncertainty in timing of revenues expected from significant strategic opportunities.

A reverse stress test has been performed to model the circumstances required to eliminate available liquidity during the going concern period, this includes reducing revenues. This reverse stress scenario would require a reduction in Group revenue in excess of 22% in comparison to the base case, before considering any significant mitigating actions, which would be below the actual reported result for the year ended 31 December 2024 (on a like-for-like basis). The Directors believe the possibility of this combination of severe downsides arising to be remote given the recurring revenue base, visibility of committed orders and expected new revenue streams secured from products known to be launching by OEMs throughout 2025.

In the unlikely event of such a scenario materialising, the Group has a range of mitigating actions, focused on reducing the Group's cost base, that could be taken to avoid a liquidity shortfall. Namely, deferring non-committed capital expenditure, delaying, or suspending research and development expenditure, and/or ultimately even making headcount reductions. It is worth noting that such actions would only be required in the event of an extreme downside scenario.

The Group is continuously monitoring and mitigating, where possible, the impacts of such risks. There is a high degree of predictability within the Group's short-term cash flows as they reflect existing technologies and products, existing OEM adoption and the committed order pipeline. The level of sensitivity testing, and reverse stress testing performed is proportionate to this level of predictability.

1. Presentation of the financial statements continued

d) Going Concern continued

The Group's business activities, together with the factors likely to affect its future development, performance and financial position are set out in the Strategic Report on pages 5 to 8.

The Group continues to have a net current assets position and maintains sufficient financial resources as at 31 December 2024. These consist of cash and cash equivalents of £8,711,000 as well as £5,000,000 of committed, but undrawn, banking facilities made available under a revolving credit facility agreement which currently expires in June 2026. The revolving credit facility is subject to leverage, interest cover and capital expenditure threshold covenants. In addition, to support the Group's working capital position, alongside the above core banking facilities, the Group also has access to ancillary funding arrangements in the form of an invoice discounting facility; of which £557,000 of the total £3,000,000 committed facility was utilised as at 31 December 2024.

Details of the Group's objectives, policies and processes for managing its capital and its exposure to financial risks, including both credit risk and liquidity risk, are included in Note 29.

2. Principal accounting policies

Revenue recognition

The Group has the following revenue streams:

1. Product sales;
2. Commissions and services; and
3. Licensee royalties.

Revenue is measured based on the consideration to which the Group expects to be entitled in a contract with a customer and excludes amounts collected on behalf of third parties.

Revenue is presented after eliminating sales within the Group and is shown net of discounts, VAT and other sales-related taxes.

Goods and services deliverable under a contract are identified as separate performance obligations to the extent that the customer can independently benefit from each good or service and they are distinct. Each such product or service provided has a defined transaction price, being its standalone selling price. Where the criteria to be separately identifiable as distinct performance obligations are not met, the goods and services are aggregated until a separate obligation is identified. Where there are multiple performance obligations, revenue is measured at the value per the contract of the consideration receivable in exchange for the products and/or services, allocated by reference to the relative stand-alone selling prices of each of the performance obligations.

Typically, goods and services provided by the Group meet the definition of separate performance obligations, with the transaction price being allocated to each such obligation. However, certain contracts in the Digital Imaging and Product Print Systems segments contain deliverables that are not distinct, such as where the services provided are essential for a customer to be able to derive a benefit from the goods purchased.

1. Product sales

This revenue stream consists of:

a. the manufacture and sale of finished goods (printheads);
b. the sale of engineered printing solutions; and
c. the sale of digital imaging devices.

Revenue is recognised when control has been transferred to the customer. Control is deemed to transfer to the customer at point of delivery or collection of the products. Revenue is generally recognised at a point in time (such as on delivery or collection) and is typically invoiced in arrears.

Certain contractual arrangements in the Product Print Systems and Digital Imaging segments require revenue to be recognised over a period of time, such as where the asset produced does not have an alternative use and the Group has an enforceable right to payment for performance completed to date. Where this is the case, the performance obligations are typically not distinct.

In order to estimate the stage of completion of the contract when recognising revenue over a period of time, an input methodology (based on total estimated labour hours to deliver the contract) is used. This is considered to best depict the performance conditions. Payments are typically invoiced in instalments.

The Group typically provides warranties for general repairs of defects that existed at the time of sale, as required by law. These assurance-type warranties are accounted for as warranty provisions. See the 'Warranty provisions' accounting policy on page 85 for full details.

2. Principal accounting policies continued

Revenue recognition continued

2. Commissions and services

This revenue stream consists of the provision of consulting and research and development services to customers.

Revenue is recognised over time where the customer simultaneously receives and consumes the benefits of the Group's performance obligations. In order to estimate the stage of completion of the contract when recognising revenue over a period of time, an input methodology (based on total estimated labour hours to deliver the contract) is used. This is considered to best depict the performance conditions.

Where this is not the case, revenue is recognised at a point in time. Payments for this revenue stream are typically in arrears.

3. Licensee royalties

The Group licenses intellectual property to third parties. Revenue is recognised on an accruals basis at a point in time, based on quarterly statements received from each licensee. The royalties arise from the licensee's use of their printheads and the Group's related intellectual property installed in equipment developed by original equipment manufacturers (OEMs).

Leasing

Leased assets are capitalised on inception of the lease as right of-use assets. A corresponding lease liability, representing the present value of the lease payments is also recognised and split between current and non-current liabilities accordingly.

The lease liability includes; fixed payments, variable lease payments dependent on an index or rate (initially measured using the index or rate on the lease commencement date) and in substance fixed payments. The variable aspect of variable payments are recognised when the rate or index takes effect resulting in an adjustment to the liability and right-of-use asset.

The discounted lease liability is calculated where possible using the interest rate implicit in the lease or where this is not attainable the incremental borrowing rate is utilised. The incremental borrowing rate is the rate the Group would have to pay to borrow the funds necessary to obtain a similar asset under similar conditions. The Group calculates the incremental borrowing rate using risk free rate of the country where the asset is held, adjusted for length of the lease and a risk premium.

Lease payments are allocated against the principal and finance cost. Finance costs, representing the unwinding of the discount on the lease liability are charged to the income statement to produce a constant periodic rate of interest on the remaining liability. The Group has elected to not present the capital and interest elements of lease payments separately within cash flows arising from financing activities. Instead, these amounts are presented in aggregate as 'lease payments' in the Consolidated Cash Flow Statement.

Right-of-use assets are measured at cost including; the discounted initial lease liability, lease payments made at or before the commencement date, any dilapidation provisions and initial direct costs and reduced by any lease incentives received.

Right-of-use assets are depreciated over the shorter of the non – cancellable lease period and any extension options that are considered reasonably certain to be taken or the useful life of the asset. The Group's current leases run from 1–20 years.

Modifications to lease agreements result in remeasurement of the lease liability and right-of-use asset.

Short-term leases, defined as less than one year, and also of low value, are recognised on a straight-line basis in the Consolidated Income Statement.

Foreign currencies

Foreign currency transactions are booked at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currency are retranslated at the rates of exchange ruling at the balance sheet date. Exchange differences arising on settlement or retranslation of monetary assets and liabilities are included in the Consolidated Income Statement.

The results of overseas subsidiaries are translated into Sterling using the average exchange rates during the year. Assets and liabilities are translated at the rates ruling at the balance sheet date. Goodwill arising on the acquisition of a foreign operation is treated as an asset of that foreign operation and as such is translated at the relevant foreign exchange rate at the balance sheet date. Exchange differences arising on this translation are recognised through other comprehensive income in the translation reserve.

Other exchange differences are recognised in the income statement in the period in which they arise.

Retirement benefit costs

Payments to defined contribution retirement benefit schemes are charged as an expense as they fall due. Payments made to state managed retirement benefit schemes are dealt with as payments to defined contribution schemes where the Group's obligations under the schemes are equivalent to those arising in a defined contribution retirement benefit scheme.

2. Principal accounting policies continued

Taxation

The tax expense represents the sum of tax currently payable and deferred tax, including UK corporation tax and foreign tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in the Consolidated Income Statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable nor deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date.

Deferred tax is the tax expected to be payable or recoverable on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill (taxable temporary differences only) or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the tax profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each reporting date and only recognised to the extent that is probable that sufficient taxable profits will be available to allow the asset to be recovered.

Deferred tax is charged or credited to the Consolidated Income Statement, except when it relates to items charged or credited in Other Comprehensive Income or directly in equity, in which case the deferred tax is also recognised within either Other Comprehensive Income or directly in equity respectively

To the extent that the Group receives a tax deduction relating to share-based payment transactions, a deferred tax asset is recognised at the appropriate tax rate on the difference in value between the market price of the underlying equity as at the date of the financial statements and the exercise price of the outstanding share options multiplied by the expired portion of the vesting period. As a result, the deferred tax impact of share options will not be derived directly from the expense reported in the consolidated income statement. Where the deductible difference exceeds the cumulative charge to the consolidated income statement the excess of the associated tax benefit is recorded directly to equity rather than in profit or loss.

Deferred tax assets and liabilities are measured on an undiscounted basis and are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Business combinations

Business combinations are accounted for using the acquisition method. On the acquisition of a business, fair values are attributed to the identifiable assets, liabilities and contingent liabilities unless the fair value cannot be reliably measured in which case the value is subsumed into goodwill. Where applicable, on a transaction-by-transaction basis the Group elects to utilise the optional concentration test when assessing whether a transaction consists of a business combination or instead is in substance the purchase of a single asset or group of similar assets. The concentration test is met if substantially all the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. Where the concentration test is met, the transaction is accounted for as an asset acquisition rather than as a business combination. The fair value of the gross assets acquired is calculated as the sum of the consideration transferred plus the fair value of liabilities assumed (other than deferred tax liabilities) less cash acquired. No goodwill arises on such transactions and acquisition costs are capitalised.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period or additional assets or liabilities are recognized to reflect new information obtained about facts and circumstances that existed as at the acquisition date that, if known, would have affected the amounts recognised as of that date. The measurement period is the period from the date of acquisition to the date the Group obtains complete information about facts and circumstances that existed as of the acquisition date – and is subject to a maximum of one year. Where measurement period adjustments are identified, comparative prior period is revised to reflect the change to the acquisition accounting.

Acquisition-related costs are expensed to the Consolidated Income Statement in the period in which they are incurred.

2. Principal accounting policies continued

Goodwill
Goodwill represents the excess of the fair value of the consideration over the fair value of the net assets acquired. Where the fair value of the consideration is less than the fair value of the acquired net assets, the deficit is recognised immediately in the Consolidated Income Statement as a bargain purchase.

Goodwill is not amortised, but is subject to an impairment review at least annually and is carried at cost less accumulated impairment losses.

Any impairment is recognised immediately in the income statement and is not subsequently reversed.

For the purpose of impairment testing, goodwill is allocated to cash generating units (CGUs). The CGU to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the carrying value may not be recoverable.

Intangible assets
Acquisition intangibles
Acquisition intangibles comprise of brands, customer relationships, patents, technology and know-how. These are capitalised at fair value and are amortised on a straight-line basis over their estimated useful lives. Amortisation of these intangibles are included within selling, general and administrative expenses within the consolidated income statement.

The principal expected useful lives are as follows:

Brands	10 years
Customer relationships	6-8 years
Patents, technology and know-how	6 years

Other intangible assets
These comprise software, licence fees and expenditure on developed technology. Costs associated with the development activities are recognised as an asset if and only if they meet the recognition criteria set out in IAS 38 'Intangible Assets', namely that:

+ the project must be technically feasible;
+ there must be the intention to complete the project;
+ there must be adequate resources to be able to complete the project;
+ the ability to use or sell the asset or product is secure;
+ the future economic benefits must exceed the costs; and
+ the ability to reliably measure costs.

Where no internally generated intangible assets can be recognised, development expenditure is recognised as an expense in the period in which it is incurred. All expenditure on research is expensed in the period in which it is incurred.

Intangible assets are amortised on a straight-line basis over their estimated useful lives. Amortisation of these intangibles are included within selling, general and administrative expenses within the consolidated income statement. Assets under construction are not amortised.

The principal expected useful lives are as follows:

Software Licence fees	3 to 15 years
Internally developed technology	1 to 20 years
Capitalised development costs – patent	Life of patent
Capitalised development costs	Life of project

The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the Consolidated Income Statement.

Property, plant and equipment
Property, plant and equipment is stated at cost less accumulated depreciation and, where appropriate, provision for impairment in value. Cost includes the original purchase price of the asset and the costs attributable to bringing the asset to its working condition for its intended use. Depreciation is included within selling, general and administrative expenses within the consolidated income statement.

Depreciation is charged so as to write off the cost of assets over their estimated useful lives, using the straight-line method, as follows:

Leasehold improvements	1 to 20 years up to the maximum of the lease term
Plant and machinery	3 to 20 years
Furniture, fittings and equipment	3 to 20 years
Buildings	Up to 40 years

The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the income statement.

Assets under the course of construction are not depreciated.

2. Principal accounting policies continued

Property, plant and equipment continued

Spare parts are capitalised within property, plant and equipment where it is expected that future economic benefits will flow to the entity and the cost can be measured reliably. This typically relates to critical spares, which must be maintained for business continuity. Depreciation of these assets commences both when the assets are bought and when they are put in use. The former has longer useful life of six years to account for the 'idle' time whilst the latter is shorter useful life of three years which is an approximation for the average useful life of a part in use.

Impairment of property, plant and equipment and intangible assets excluding goodwill

A review is undertaken upon the occurrence of events or circumstances which indicate that the carrying amount may not be recoverable. In addition, any assets not yet available for use are tested for impairment annually.

The recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted. If it is not possible to determine the recoverable amount for an individual asset, the assessment is made for the asset's cash-generating unit (CGU).

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is calculated using the first in, first out (FIFO) cost formula, by applying the standard cost methodology, with costs including direct materials, direct labour costs and an attributable proportion of manufacturing overheads based on normal levels of activity that have been incurred in bringing the inventories to their present location and condition. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution. Provision is made for obsolete, slow-moving or defective items where applicable.

Other income

Other income comprises income earned by the business outside of the ordinary course of operations. This revenue is recognised at a point in time when risks and rewards have passed.

Financial instruments

Financial instruments are recognised and classified according to the substance of the contractual arrangements into which the Group enters.

An equity instrument is any contract that evidences a residual interest in the assets of the entity after deducting all of its financial liabilities. Financial assets and financial liabilities are recognised in the Group's Statement of Financial Position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets

Cash and cash equivalents, trade and other receivables (excluding prepayments and contract assets) and financial assets held at fair value through profit or loss are categorised as financial assets.

On initial recognition, financial assets are classified as either fair value through profit or loss, or amortised cost. The classification depends on the purpose for which the financial assets were acquired and their contractual cash flows.

Amortised cost assets are non-derivative debt instruments that meet the following conditions:

+ the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
+ the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance.

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the relevant period. For financial assets other than purchased or originated credit-impaired financial assets, the effective interest rate is the rate that exactly discounts estimated future cash receipts excluding expected credit losses, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition.

Interest income is recognised in the Consolidated Income Statement and is included in the 'finance income' line item.

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss.

2. Principal accounting policies continued

Financial assets continued

ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms. ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

The Group always measures the loss allowance for trade receivables at an amount equal to lifetime ECL. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the debtor, general economic conditions of the industry in which the debtor operates and an assessment of both the current as well as the forecast direction of conditions at the reporting date.

For financial assets carried at amortised cost, the amount of the impairment is the difference between the asset's carrying amount and the present value of the estimated future cash flows, discounted at the financial asset's original effective interest rate.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits with an original maturity of three months or less.

Trade and other receivables

Trade receivables are recognised at cost less allowances for expected credit losses. The provision is based on the Group's expected credit loss, which is calculated using the simplified approach for trade receivables based on historical data adjusted for forward looking information.

Financial liabilities

Financial liabilities are those which involve a contractual obligation to deliver cash to external parties at a future date.

Interest-bearing loans and borrowings

Interest-bearing loans and bank overdrafts are measured initially at fair value, net of direct issue costs. Interest is subsequently at amortised cost.

Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accrual basis in the Consolidated Income Statement using the effective interest rate method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

The Group has entered into an invoice discounting arrangement. See Note 26.

Trade and other payables

Trade payables are non-interest bearing and are stated at amortised cost which approximates cost here due to the short term nature of the payables.

Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event and it is probable that the Group will be required to settle that obligation. Provisions are measured at the Directors' best estimate of the expenditure required to settle the obligation at the date of the statement of financial position and are discounted where the effect of the time value of money is material.

Restructuring provisions

A restructuring provision is recognised when the Group has developed a detailed formal plan for the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement the plan or announcing its main features to those affected by it, and the plan has reached a stage where the decision is unlikely to be reversed. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring, which are those amounts that are both necessarily entailed by the restructuring and not associated with the ongoing activities of the entity.

Warranty provisions

Provisions for the expected cost of warranty obligations under contracts with customers and local sale of goods legislation are recognised in the month of sale of the relevant products, at the Directors' best estimate of the expenditure required to settle the Group's obligation.

For general warranty provisions, this estimate is based on historical trends. For specific warranty provisions, this estimate is based on the known faults in the product sold in the year.

Dilapidation provisions

Provisions for leased property dilapidation are recognised at the commencement of the lease using the Group's best estimate to settle the obligation at the end of the lease term.

2. Principal accounting policies continued

Contract assets and contract liabilities

A contract asset is recognised when revenue recognised in respect of a customer contract exceeds amounts received or receivable from the customer. This situation arises when the recognition of revenue over time to date is greater than amounts invoiced to the customer and invoicing is conditional on further performance. The carrying amount is reduced by allowances for expected credit losses.

When there is an unconditional entitlement, generally when invoices are raised, the contract asset values are reclassified to trade receivables.

Contract liabilities comprise the Group's obligation to transfer goods or services to a customer for which the Group has received payment from the customer in advance of revenue recognition. This situation arises when the customer is invoiced in advance and the revenue recognised over time is lower than the amounts invoiced to the customer.

Discontinued operations

A discontinued operation is a separate major line of business which has either been disposed of or is classified as held for sale. To be classified as held for sale the non-current asset or disposal group must meet these three criteria:

+ the carrying amount is to be recovered principally through a sale transaction rather than through continuing use
+ be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (or disposal groups)
+ the sale must be highly probable. This is considered the case when the board is committed to a plan to sell, an active program to locate a buyer and complete the plan must have been initiated. And the asset (or disposal group) must be actively marketed for sale at a price that is reasonable in relation to its current fair value.

Disclosure elections

The results of discontinued operations are presented separately as a single line in the consolidated income statement and consolidated cashflow statement. Comparatives are restated in the statement of comprehensive income and cashflow statement. In contrast the statement of financial position is not restated.

Where there is intergroup trading between the continuing and discontinued operations, both external and intragroup transactions are included as a discontinued operation. This method's merit lies in its accurate representation of both entities' performance.

Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in share premium as a deduction from the proceeds.

Own shares

No gain or loss is recognised in the Consolidated Income Statement on the purchase, sale, issue or cancellation of the Group's own shares. Instead, any difference between the carrying amount and the consideration paid is recognised in equity.

Share-based payments

Equity settled share-based payments are measured at fair value (excluding the effect of non-market-based vesting conditions) at the date of grant and is expensed on a straight-line basis over the vesting period, based on the Group's estimate of the number of shares that will eventually vest.

Share-based payments where vesting is by reference to external, market based performance criteria (such as growth in an external index) are measured using the Monte Carlo simulation. Those which are subject only to internal, non-market based performance criteria and/or service conditions are measured using the Black-Scholes model.

For schemes that have non-market based performance conditions the number of options expected to vest is recalculated at each reporting date based on expectations of leavers prior to vesting. The number of options expected to vest for schemes with internal performance criteria is also adjusted based on expectations of performance against targets. No adjustments are made for expected performance against external, market based targets. Charges recognised in the Consolidated Income Statement in respect of equity-settled share-based payments are credited to the share-based payments reserve in equity.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and the entities under its control (together the 'Group'). Control is achieved when the Company has power to control the financial and operating policies of an entity either directly or indirectly and the ability to use that power to affect the returns it receives from its involvement with the entity.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Where necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies in line with those used by the Group. All intra-group transactions, balances, equity, income and expenses are eliminated on consolidation.

3. Changes in accounting policies and disclosures

Except where disclosed otherwise in this note, the accounting policies adopted in the preparation of the consolidated financial statements are consistent with those applied when preparing the consolidated financial statements for the year ended 31 December 2023.

New accounting standards, amendments and interpretations adopted by the Group

The following new standards and amendments to existing standards became effective in January 2024 and have been adopted in the consolidated financial statements for the first time during the year ended 31 December 2024.

These have been assessed as having no financial or disclosure impact on these consolidated financial statements.

	Date issued	Effective for accounting periods beginning on or after
Amendments to IAS 1 Presentation of Financial Statements		
– Clarification of the conditions required to be met in order to classify liabilities, notably debt with covenant, as either current or non-current.	October 2022	1 January 2024
Amendments to IFRS 16 Leases		
– Specifies the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction.	September 2022	1 January 2024

New standards, amendments and interpretations not yet adopted by the Group

The following standards, amendments and interpretations were in issue but were not yet effective at the balance sheet date. These have not yet been endorsed by the UK Endorsement Board. These standards have not been applied when preparing the consolidated financial statements for the year ended 31 December 2024.

It is not anticipated that the application of the below will have a significant financial or disclosure impact in future years.

	Date issued	Effective for accounting periods beginning on or after
Amendments to IAS 21 The Effects of Changes in Foreign Exchange Rates		
– Provides guidance to specify when a currency is exchangeable and how to determine the exchange rate when it is not.	August 2023	1 January 2025
Amendments to IFRS 9 Financial Instruments and IFRS 7 Financial Instruments: Disclosures		
– Clarifies the classification and measurement of financial instruments.	May 2024	1 January 2026
IFRS 18 Presentation and Disclosures in Financial Statements		
– Specifies the requirements for presentation and disclosure of information in financial statements for all entities applying IFRS.	April 2024	1 January 2027
IFRS 19 Subsidiaries without Public Accountability		
– Sets out the disclosure requirements an eligible entity is permitted to apply instead of the disclosure requirements in other IFRS Accounting Standards.	May 2024	1 January 2027

4. Key sources of estimation uncertainty and critical accounting judgements

The preparation of financial statements requires management to make judgements, estimates and assumptions about the application of its accounting policies which affect the reported amounts of assets, liabilities, revenue and expenses. Actual amounts and results may differ from those estimates.

Judgements and estimates are evaluated regularly and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Any revisions to accounting estimates are recognised in the period in which the estimate is revised.

a) Critical accounting judgements

The accounting judgements and assumptions (excluding those which also involve estimates which are covered in the key sources of estimation uncertainty section below) included in the consolidated financial statements which have a material impact on amounts reported are as detailed below.

Capitalisation of development costs

The Group capitalises costs for product development projects. At 31 December 2024, the carrying amount of capitalised development costs was £2,411,000 (2023: £2,325,000). Development costs can be capitalised when they relate to a project that is technically feasible, there is the intention and are adequate resources to be able to complete the project, there are secure future economic benefits in excess of the development costs incurred and all such costs can be reliably measured.

During a printhead product development programme many sub-systems are evaluated in parallel and carry their own levels of risk. For most internal projects, technical feasibility is typically only deemed to have been achieved at the end of a project; as a result, internal costs of development activities are typically not capitalised.

Timing of revenue recognition

The assessment used by the Group to determine the timing of revenue recognition could have a significant impact on the amount and timing of revenue recognised. Under certain contracts entered into by the Product Print Systems and the Digital Imaging segments, revenue has been recognised over time (rather than at a point in time) following judgements taken as to the existence of alternative uses for the custom-built printing solutions being sold and whether the Group has an enforceable right to payment.

Firstly, the assessment of which customer projects include significant customisation (therefore have no alternative use) is based on the extent to which each machine is made to specific, detailed measurements at the request of a customer and takes into consideration the commercial reality underlying each contract. Whilst unlikely, it remains possible that custom-built machines may have an alternative use and could potentially be sold to a different customer. Nevertheless, this remote possibility is not deemed to change the determination of the timing of revenue recognition because selling to an alternative customer would necessitate modifications to the printhead/machinery, therefore, significant additional cost.

Secondly, when determining the timing of revenue recognition an assessment is made as to whether the contract contains an explicit enforceable right to payment for performance completed to date, being recovery of labour hours and other costs incurred in satisfying the performance obligations plus a reasonable profit margin.

Where these two factors are assessed to be the case, the performance obligation under the contract is deemed to be satisfied over time.

b) Key sources of estimation uncertainty

The accounting estimates included in the consolidated financial statements which have a material impact on amounts reported are as detailed below.

Fair value measurement of contingent consideration

An element of the consideration receivable for the Group's divestment in November 2021 of its remaining interest in the share capital of Xaar 3D Limited remains contingent on achievement of certain revenue milestones and performance targets. Contingent consideration, resulting from business combinations, is valued at fair value at the acquisition date as part of the business combination. When the contingent consideration meets the definition of a financial asset, it is subsequently remeasured to fair value at each reporting date with any revaluation gains or losses being recognised in the Consolidated Income Statement.

Fair value is estimated using the Monte Carlo simulation. Certain inputs into this statistical model involve estimation; namely, the risk adjusted discount rate and revenue volatility. These estimates are subject to rapid changes in market conditions that cannot always be fully anticipated. In light of the materiality of contingent consideration held in the Consolidated Statement of Financial Position, this uncertainty is considered to represent a key source of estimation uncertainty.

Contingent consideration with an estimated fair value of £10,863,000 was recognised at the acquisition date and remeasured to £4,918,000 as at the reporting date. Future developments may require further revisions to the estimated fair value. The maximum consideration potentially receivable at the acquisition date was £16,691,000. Full sensitivity to changes in these estimates is provided in Note 29.

4. Key sources of estimation uncertainty and critical accounting judgements continued

b) Key sources of estimation uncertainty continued

Impairment of goodwill and other intangible assets

The cost and carrying amount of goodwill at 31 December 2024 was £6,959,000 (2023: £6,873,000). Goodwill is deemed to have an indefinite useful economic life and is, therefore, not amortised. As a result, the Group reviews goodwill for impairment on at least an annual basis and more frequently where there are indicators of potential impairment. The impairment review requires the value-in-use of each CGU to be estimated, these calculations are based on a number of assumptions. Areas of significant judgement include:

+ the estimation of future cash flows;
+ the selection of risk and the estimation of risk adjustment factors to be applied to cash flows;
+ the selection of an appropriate discount rate to calculate present value; and
+ the selection of an appropriate terminal growth rate.

The assumptions used in the impairment test are detailed in Note 15. The assumptions relating to future cash flows, estimated useful economic lives and discount rates are based on forecasts and are, therefore, inherently judgemental. Future events could result in the assumptions used needing to be revised, changing the outcome of the impairment test and resulting in impairment charges being recognised in the Consolidated Income Statement.

Revenue recognition – estimating stage of completion of contracts

Revenue receivable under contracts with customers for the manufacture of bespoke machinery and equipment as well as for the provision of research and development consultancy services is generally required to be recognised over a period of time in line with the stage of completion of each contract with the customer. Such contractual arrangements are isolated to the Product Print Systems and Digital Imaging segments.

In order to estimate the stage of completion of all such contracts, an input methodology (based on total estimated labour hours and total estimated costs to deliver the contract) is used. Each month an assessment is undertaken on a contract-by-contract basis of work in progress in respect of both the supply of individual components and the labour hours allocated to each project. These costs incurred are assessed against the total estimated costs to complete all contractual, performance obligations under each contract.

This assessment enables both the stage of completion and profitability of the contract to be estimated. This estimate is subject to a level of uncertainty as it is not always possible to anticipate the impact of market factors on the total project cost.

The aggregate transaction price allocated to partially satisfied and unsatisfied performance obligations under open contracts with customers as at the balance sheet date is set out in Note 6.

Inventory write down

The Group is required to write inventory down to the lower of cost and net realisable value. To determine the write down of inventory the Group estimates the future sales volumes, sales prices, costs to sell inventory, and shrinkage. The gross value and write down of inventories, as well as cost of inventory write downs in the period, are disclosed in Note 20. The Group uses a range of different techniques to write down inventory to the lower of cost and net realisable value including a formulaic methodology based on the age of inventory. The aged inventory methodology writes down inventory by a specific percentage based on time elapsed from purchase date and these specific percentages are based on historical data. The uncertainty associated with estimating the write down of inventory is whether the realisable value on sale or disposal of inventory approximates the value of inventory after write downs have been applied. The ultimate sale or disposal of inventory results in a reversal of the write down against the cost of inventory disposed with a potential gain or loss depending upon the accuracy of the estimation.

Notes to the consolidated financial statements continued
for the year ended 31 December 2024

5. Operating segments

The Group's operating segments are determined based on the internal reporting to the Chief Operating Decision Maker (CODM). The CODM has been determined to be the Chief Executive Officer, with support from the other members of the Board of Directors, being the individual who is primarily responsible for the allocation of resources to segments and the assessment of performance of the segments.

The principal activities of the Group are presented in the following segments: 'Printhead', 'Product Print Systems', 'Digital Imaging' and 'Ink Supply Systems'. This presentation reflects how the Group's operating performance is reviewed internally by management.

By the end of 2024 the Digital Imaging business has been restructured. The printbar business has been transferred to Printhead and the remainder of the business has ceased.

Income Statement

Year ended 31 December 2024	Printhead £'000	Product Print Systems £'000	Digital Imaging £'000	Ink Supply Systems £'000	Head Office Entities £'000	Total £'000
Revenue – total	34,615	16,807	10,114	3,417	–	64,953
Revenue – intra segment	(1,143)	(731)	(765)	(906)	–	(3,545)
Revenue – external	33,472	16,076	9,349	2,511	–	61,408
Adjusted operating (loss) / profit	2,816	1,211	1,502	1,093	(5,955)	667
Adjusting items (Note 9)	(533)	(705)	(3,720)	(363)	(6,410)	(11,731)
Operating (loss) / profit	2,283	506	(2,218)	730	(12,365)	(11,064)

Year ended 31 December 2023	Printhead £'000	Product Print Systems £'000	Digital Imaging £'000	Ink Supply Systems £'000	Head Office Entities £'000	Total £'000
Revenue – total	37,857	22,063	8,748	3,140	–	71,808
Revenue – intra segment (restated)*	(771)	–	–	(796)	–	(1,567)
Revenue – external (restated)	37,086	22,063	8,748	2,344	–	70,241
Adjusted operating (loss) / profit	3,636	3,195	2,207	822	(6,503)	3,357
Adjusting items (restated)* (Note 9)	(1,808)	(152)	(1,166)	(349)	(2,126)	(5,601)
Operating (loss) / profit	1,828	3,043	1,041	473	(8,629)	(2,244)

* Refer Note 32 for prior year restatement. Additionally, the share-based payment charge and management recharges elimination have been allocated and Head Office separated from Printhead

Statement of financial position

Assets are allocated to the segment which has responsibility for their control. No information is provided for segment liabilities as this measure is not provided to the CODM.

As at 31 December 2024	Printhead £'000	Product Print Systems £'000	Digital Imaging £'000	Ink Supply Systems £'000	Head Office Entities £'000	Total £'000
Non-current assets	17,294	8,862	698	1,347	5,236	33,437
Current assets	29,883	7,247	5,295	2,529	2,295	47,249
Total segment assets	41,177	16,109	5,993	3,876	7,531	80,686

As at 31 December 2023	Printhead £'000	Product Print Systems £'000	Digital Imaging £'000	Ink Supply Systems £'000	Head Office Entities £'000	Total £'000
Non-current assets	19,830	8,311	5,275	1,467	10,704	45,587
Current assets	30,812	9,197	6,784	1,626	3,337	51,756
Total segment assets	50,642	17,508	12,059	3,093	14,041	97,343

Other segment information

Year ended 31 December 2024	Printhead £'000	Product Print Systems £'000	Digital Imaging £'000	Ink Supply Systems £'000	Head Office Entities £'000	Total £'000
Depreciation and amortisation	2,941	284	1,901	377	117	5,620
Share-based payment charge	623	–	154	33	286	1,096
Capital expenditure	586	350	–	–	–	936

Year ended 31 December 2023	Printhead £'000	Product Print Systems £'000	Digital Imaging £'000	Ink Supply Systems £'000	Head Office Entities £'000	Total £'000
Depreciation and amortisation	3,081	276	1,638	127	363	5,485
Share-based payment charge	641	(144)	110	19	1,256	1,882
Capital expenditure	1,231	190	–	75	–	1,496

*Restated the allocation to each CGU to allocate out the share-based payment charge as well as the amortisation of acquired intangibles. Printhead and Head office Entities now shown separately.

6. Revenue

The Group derives its revenue from the provision of goods and services both at a point in time and over time:

	2024 £'000	2023 restated £'000
Revenue recognised at point in time	**51,658**	56,910
Revenue recognised over time	**9,750**	13,331
	61,408	70,241

Revenues from the top five customers represent 27% of revenues (2023: 24%). The Group's largest customer represents 13% of its revenues (2023 did not have any customer which contributed more than 10% of its revenues).

Geographical information

Revenues are attributed to regions based primarily on customers' location. The Group's revenue from external customers and information about its non-current segment assets (excluding deferred tax and financial asset at FVTPL) is set out below:

	Revenue		Non-current assets	
	2024 £'000	2023 restated £'000	2024 £'000	2023 £'000
The Americas	**27,702**	30,222	**8,090**	7,927
EMEA	**24,039**	27,844	**21,081**	28,504
China	**7,534**	7,440	**149**	163
Rest of Asia Pacific	**2,133**	4,735	**–**	–
	61,408	70,241	**29,320**	36,594

Revenue by operating segment and type

The following table shows the disaggregation of revenue by major product/service lines for continuing operations.

	Product sales		Commissions & services		Licensee royalties		Total	
	2024 £'000	2023 restated £'000	2024 £'000	2023 £'000	2024 £'000	2023 £'000	2024 £'000	2023 restated £'000
Printhead	**31,274**	35,643	**2,198**	1,428	**–**	15	**33,472**	37,086
Product Print Systems	**15,409**	21,511	**667**	552	**–**	–	**16,076**	22,063
Digital Imaging	**7,284**	6,094	**2,066**	2,654	**–**	–	**9,350**	8,748
Ink Supply Systems	**2,510**	2,344	**–**	–	**–**	–	**2,510**	2,344
	56,477	65,592	**4,931**	4,634	**–**	15	**61,408**	70,241

Partially completed contracts

The operating segments Product Print Systems and Digital Imaging have contracts with customers where the performance obligations are partially unsatisfied at 31 December 2024. The transaction price is allocated between the proportionately satisfied and unsatisfied performance obligations. The satisfied portion has been recognised whilst the transaction price allocated to the unsatisfied portion has not been recognised.

	2024 £'000	2023 £'000
Partially satisfied performance conditions	**3,607**	13,331
Partially unsatisfied performance conditions	**948**	3,500
	4,555	16,831

£935,000 of partially unsatisfied performance conditions will be recognised in the year ending 31 December 2025 with the remaining £13,000 in future periods (2023: £3,495,000 in 2024, £40,000 in future periods).

Notes to the consolidated financial statements continued
for the year ended 31 December 2024

7. Operating (loss) / profit

Operating (loss) / profit for the year is stated after charging / (crediting):

	Notes	Year ended 31 December 2024 £'000	Year ended 31 December 2023 restated £'000
Research and development expenses		**5,256**	5,642
UK research and development tax credits	9	**(228)**	(179)
Depreciation of property, plant and equipment	17	**2,751**	2,914
Impairment losses on property, plant and equipment	17	**112**	–
Loss on disposal of property, plant and equipment	17	**126**	24
Depreciation of right-of-use assets	18	**1,050**	1,084
Impairment losses on right-of-use-assets	18	**272**	–
Amortisation of other intangible assets	16	**1,819**	1,487
Impairment of other intangible assets	16	**502**	–
Costs of inventories recognised as an expense		**35,230**	39,589
Write down of inventories as an expense		**2,741**	2,040
Impairment losses on financial assets	29	**(78)**	99
Impairment of contract assets	9	**514**	–
Legal provision	9	**191**	296
Net (loss) / gain on foreign exchange		**(48)**	508

Auditor's remuneration comprised the following:

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 £'000
Audit Services – Group and Company audit	**508**	547
Total audit fees	**508**	547
Audit related assurance services		
– Interim review	**72**	–
Total assurance-related fees	**–**	–
Total auditor remuneration	**580**	547

The Group's policy on the use of the auditor for non-audit services is set out in the Audit Committee Report on page 54.

8. Other operating income

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 £'000
Profit on disposal of intangible assets	**–**	2,036
Settlements received	**–**	165
Total other operating income	**–**	2,201

In June 2023 the Group entered into a series of transactions in the context of the integration of the recently acquired FFEI Limited business. These consisted in part of the disposal of the non-core Life Sciences activities and all associated patents, software and technological know-how. Consideration received for these intangible assets totalled £2,312,000, generating a profit of £2,036,000 after deduction of the asset's carrying value. The consideration was receivable in installments with £1,760,000 having been received as at 31 December 2023 and £552,000 in the year ending 31 December 2024.

Settlements received constitute compensation under legal claims.

9. Adjusting items

The Directors believe that the 'adjusted profit before tax' and 'adjusted earnings per share' alternative performance measures presented provide a consistent presentation of the Group's underlying operational performance. They also present shareholders with a clearer insight of performance metrics used by the Chief Operating Decision Maker and mitigate volatility, resulting from external factors that are not influenced by the Group.

These items are as defined below and have been presented consistently in both the current and prior year.

		Year ended 31 December 2024 £'000	Year ended 31 December 2023 restated £'000
Share-based payments charges	(i)	**(1,097)**	(1,882)
Exchange gains / (losses) on intra-group transactions	(ii)	**110**	(364)
Restructuring and transaction expenses	(iii)	**(2,505)**	(1,501)
Research and development expenditure tax credits	(iv)	**228**	179
Fair value losses on financial assets at FVTPL	(v)	**(5,561)**	(369)
Amortisation of acquisition intangibles	(vi)	**(2,201)**	(1,368)
Impairment of contract assets	(vii)	**(514)**	–
Legal provision	(viii)	**(191)**	(296)
Affecting operating profit and profit before tax		**(11,731)**	(5,601)
Tax effect of adjusting items		**497**	373
Total adjusting items after tax		**(11,234)**	(5,228)

i. Comprises share-based payment charges of £1,182,000 (2023: £1,937,000) partially offset by an accrual release of £85,000 (2023: release of £55,000) for the associated employer's social security contributions and are included in selling, general and administrative expenses.

ii. Comprises exchange gains or losses as a result of USD denominated intra-group loans between UK and US entities. Such costs are included in selling, general and administrative expenses.

iii. Comprises restructuring costs of £1,132,000 (2023: £1,501,000), M&A transaction costs of £182,000 (2023: £nil), £1,205,000 (2023: £nil) related to the rationalisation of the Digital Imaging business and subsequent asset review and a £14,000 credit (2023: £740,000 expense) relating from the Group's operational efficiency program. Restructuring costs include provision for redundancy costs £994,000 (2023: £761,000), £121,000 TUPE related bonuses and £17,000 redundancy related legal fees. Such costs are included in selling, general and administrative expenses.

iv. Comprises UK corporation tax relief relating to qualifying research and development expenditure. £134,000 relates to XaarJet Limited and £81,000 relates to FFEI Limited for the year ended 31 December 2024. £13,000 relates to Xaar Technology prior year adjustments.

During year ended 31 December 2023, £15,000 related to XaarJet Limited and £164,000 related to FFEI Limited. These credits are included in research and development expenses.

v. Comprises the fair value movement on contingent consideration that arose on the Group's divestment of Xaar 3D Limited. Such amounts are included in selling, general and administrative expenses. Refer to Note 29 for further information.

vi. The intangible assets consist of the software, patents and customer relationships recognised on acquisition of FFEI Limited in 2021 and the customer relationships and brand value recognised on acquisition of Megnajet Limited in 2022. These costs are included in selling, general and administrative expenses.

vii. During the year it became apparent that we will be unable to collect the full contract value on a contract which commenced in 2021 in our Product Print systems business segment. This contract is therefore impaired to the expected recoverable amount. No profits have been recognised in adjusted profits on this contract in the current or preceding year.

viii. In January 2025, we identified a historical breach of employment law regulations within one of our operations dating back to 2021. Following a comprehensive investigation, we have assessed the potential liability associated with this matter to be approximately £613,000 excluding any legal fees. £191,000 has been recognised as an expense the current year (£296,000 in 2023). Refer to Note 32 for the prior period restatement.

10. Employees and Directors

The average monthly number of employees including Executive Directors was:

	Year ended 31 December 2024 Number	Year ended 31 December 2023 Number
Research and development	**52**	82
Sales and marketing	**46**	49
Manufacturing and engineering	**198**	230
Administration	**63**	65
	359	426

10. Employees and Directors continued

Their aggregate remuneration comprised:

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 £'000
Wages and salaries	20,557	23,656
Social security costs	2,307	2,594
Post retirement benefits	1,159	1,407
Share-based payments charge	1,097	1,882
Total staff costs	25,120	29,539

Directors' Remuneration

The remuneration of the Directors, including rewards under share schemes and other contractual benefits, is included in the Directors' Remuneration Report on pages 57 to 68.

Key Management Personnel

Key management personnel consist of the Group's Board of Directors.

11. Finance income and costs

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 £'000
Interest receivable	134	89
Finance income	134	89
Interest expense on lease liabilities	(245)	(261)
Interest payable on bank borrowings	(137)	(179)
Interest expense on invoice securitisation / discounting	(95)	(84)
Other Interest costs	(18)	(38)
Finance costs	(495)	(562)

12. Tax

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 restated £'000
Current tax		
Current income tax credit – UK	(233)	(304)
Current income tax charge – overseas	238	291
Adjustment in respect of prior years	(378)	(467)
	(373)	(480)
Deferred tax		
Origination and reversal of temporary differences	(342)	190
Adjustment in respect of prior years	(18)	(19)
	(360)	171
Total tax credit	(733)	(309)

12. Tax continued

Reconciliation of tax credit

The tax credit for the year differs from the standard rate of corporation tax in the UK of 25% (2023: 23.5% due to in year rate change from 21% to 25%). The differences are explained below:

	Year ended 31 December 2024 £'000	Year ended 31 December 2024 %	Year ended 31 December 2023 restated £'000	Year ended 31 December 2023 restated %
Loss before tax	**(11,425)**		(2,717)	
Notional tax charge at the UK corporation tax rate of 25.0% (2023: 23.5%)	**(2,856)**	**25.0%**	(638)	23.5%
Effects of:				
Tax effect of non-deductible expenses*	**1,829**	**(15.9%)**	755	(27.8%)
Tax effect of non-taxable income	**(30)**	**0.3%**	3	(0.1%)
R&D SME tax credit	**91**	**(0.8%)**	–	–
Adjustments in respect of overseas tax rates	**13**	**(0.1%)**	(15)	0.5%
Utilisation of brought forward losses previously unrecognised	**650**	**(5.7%)**	302	(11.1%)
Adjustments in respect of prior years	**(396)**	**3.7%**	(486)	17.9%
Losses surrendered for tax credit	**–**	**–**	(390)	14.4%
Foreign exchange on translation of balances	**(34)**	**0.0%**	160	(5.9%)
Total tax credit and effective tax rate	**(733)**	**6.4%**	(309)	11.4%

* Expenses not deductible for tax purposes predominantly consist of valuation and exchange rate movements on capital items and share-based payments charges.

Effective tax rate

The analysis of the Group's effective tax rate between adjusted and total reported activities is as follows:

	Year ended 31 December 2024			Year ended 31 December 2023 restated		
	Adjusted £'000	Adjusting items £'000	Total reported £'000	Adjusted £'000	Adjusting items £'000	Total reported £'000
(Loss) / profit before tax	**306**	**(11,731)**	**(11,425)**	2,884	(5,601)	(2,717)
Tax (credit) / charge	**(236)**	**(497)**	**(733)**	64	(373)	(309)
Effective tax rate	**(77.1%)**	**4.2%**	**6.4%**	2.2%	6.7%	11.4%

Factors affecting the tax charge of future years

Future tax charges, therefore the Group's effective tax rate, may be affected by factors such as acquisitions, disposals, restructuring and tax regime reforms.

The effective tax rate of the group changes depending on the relative before tax results of our UK and US businesses.

No planned UK corporation tax rate changes have been announced by the UK Government.

No planned US corporation tax rate changes have been announced by the US Government.

Notes to the consolidated financial statements continued
for the year ended 31 December 2024

13. Earnings per share

Basic EPS and adjusted basic EPS are calculated by dividing the earnings attributable to the equity shareholders of the Company by the weighted average number of shares outstanding during the year. Diluted EPS and adjusted diluted EPS are calculated on the same basis as basic EPS but with a further adjustment to the weighted average number of shares outstanding to assume conversion of all potentially dilutive ordinary shares. Such potentially dilutive ordinary shares comprise share options and awards granted to employees where the exercise price is less than the average market price of the Company's ordinary shares during the year and any unvested shares which have met, or are expected to meet, the performance conditions at the end of the year.

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 restated £'000
Earnings		
Profit attributable to equity shareholders of the parent – adjusted	**542**	2,820
Adjusting items	**(11,234)**	(5,228)
Loss from attributable to equity shareholders of the parent – reported	**(10,692)**	(2,408)

	Number	Number
Number of shares		
Weighted average number of ordinary shares in issue	**79,377,941**	78,584,418
Less: ordinary shares held by Xaar Trustee Limited and the Xaar Plc ESOP Trust	**(313,201)**	(335,556)
Weighted average number of ordinary shares for the purposes of basic EPS	**79,064,740**	78,248,862
Effect of potentially dilutive ordinary shares – share options and awards	**2,581,021**	2,613,007
Weighted average number of ordinary shares for the purposes of diluted EPS	**81,645,761**	80,861,869

	Year ended 31 December 2024 Pence per share	Year ended 31 December 2023 restated Pence per share
Basic earnings per share	**(13.5)p**	(3.0)p
Diluted earnings per share	**(13.5)p**	(3.0)p
Adjusted basic earnings per share	**0.7p**	3.6p
Adjusted diluted earnings per share	**0.7p**	3.5p

14. Dividends

No interim or final dividend was proposed or paid during either the current or preceding year.

The Board of Directors are mindful of the importance of dividends to its shareholders and intends to resume the payment of dividends as soon as conditions allow.

15. Goodwill

	31 December 2024 £'000	31 December 2023 £'000
Cost and carrying amount		
Balance at 1 January	**6,873**	7,163
Exchange differences	**86**	(290)
Balance at 31 December	**6,959**	6,873
Allocated to Product Print Systems CGU	**5,609**	5,523
Allocated to Digital Imaging CGU	**689**	689
Allocated to Ink Delivery Systems CGU	**661**	661
Total	**6,959**	6,873

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired. Having performed impairment testing, no impairment has been identified and therefore no impairment loss has been recognised during either the current or preceding year.

Goodwill balances have been tested for impairment on the following basis:

+ The recoverable amount of each CGU has been assessed by reference to its value-in-use, which has been estimated using discounted cash flow forecasts and use of terminal values to perpetuity. The basis of these forecasts is the Board approved budget for the next year and management reviewed three-year plans, which have been extrapolated to a five-year view for each CGU, taking into consideration any expected inflationary pressures. Margins are broadly consistent with historic performance and revenues assumed take into account past experience and are reflective of a conservative view of the Group's core strategy;
+ Discount rates used range between 16.6% and 15.0% (2023: 16.1 % and 14.2%) reflecting specialist, third party advice. These rates have been calculated taking into account geographies, size of businesses and industry risk factors;
+ Long-term growth rates used are 2% (2023: 2%) for all UK based CGUs and 2% (2023: 2%) for those operating in the US (being Product Print Systems only). These rates are based on long term target inflation rates.

The outcome of the impairment assessments conducted are dependent on estimates which have been subject to sensitivity analyses before a conclusion on impairment was made. It is management's view that the key assumptions are revenue growth, gross margin % and discount rate. Any reasonable possible change to these sensitivities that could result in an impairment charge have been disclosed below:

Product Print Systems impairment review

Using a discount rate of 15.0% (2023: 14.2%) the recoverable amount calculated exceeds the carrying value of the CGU by $11.8 million (2023: $12.3 million). The carrying amount of goodwill would exceed its recoverable amount, when compared to the risk adjusted cash flows, if:

+ forecast compound annual revenue growth over the five-year period were to decline from a forecast of 6.9% to 3.5%, representing a movement in revenue from $21.8 million in 2024 to $25.9 million in 2029, assuming no mitigating actions were taken
+ there was a reduction in assumed direct gross margin from 36% to 33%.

Digital Imaging impairment review

Going forward, value derived from the acquisition of FFEI will be recognised by the sale of printbars, which will be manufactured and sold by XaarJet Limited. The combined gross profits resulting from 2025 committed orders and a percentage of 2025 forecasted sales exceeds the goodwill value, indicating no impairment is required.

No reasonably possible changes to assumptions that could result in an impairment charge have been identified.

Ink Delivery Systems impairment review

Using a discount rate of 16.6% (2023: 16.1%) reflecting specialist, third party advice the recoverable amount calculated exceeds the carrying value of the CGU by £1.5 million (2023: £1.5 million). Therefore, no impairment is required.

No reasonable changes to assumptions that could result in an impairment charge have been identified.

16. Other intangible assets

	Acquisition based							
	Technology based £'000	Brands £'000	Customer relationships £'000	Sub-total £'000	Development costs £'000	Licence fees £'000	Software £'000	Total £'000
Cost								
At 1 January 2023	5,034	281	1,626	6,941	40,566	1,632	3,514	52,653
Additions	–	–	–	–	446	–	6	453
Disposals in the year	(414)	–	–	(414)	–	–	(7)	(422)
Transfers from Plant and Machinery	–	–	–	–	–	–	4	4
Exchange differences	–	–	–	–	–	–	(9)	(9)
At 31 December 2023	4,620	281	1,626	6,527	41,012	1,632	3,508	52,679
Additions	–	–	–	–	86	–	–	86
At 31 December 2024	**4,620**	**281**	**1,626**	**6,527**	**41,098**	**1,632**	**3,508**	**52,765**
Accumulated amortisation								
At 1 January 2023	969	23	345	1,337	38,687	570	3,378	43,972
Charge in the year	1,087	28	253	1,368	–	77	42	1,487
Disposals in the year	(138)	–	–	(138)	–	–	(7)	(145)
Exchange differences	–	–	–	–	–	–	(1)	(1)
At 31 December 2023	1,918	51	598	2,567	38,687	647	3,412	45,313
Charge in the year	1,417	28	253	1,699	–	77	44	1,819
Impairment	–	–	502	502	–	–	–	502
Exchange differences	–	–	–	–	–	–	(5)	(5)
At 31 December 2024	**3,335**	**79**	**1,353**	**4,767**	**38,687**	**724**	**3,451**	**47,629**
At 31 December 2023	2,702	230	1,028	3,959	2,325	985	96	7,366
At 31 December 2024	**1,285**	**202**	**273**	**1,760**	**2,411**	**908**	**57**	**5,136**

Development costs of £86,000 (2023: £446,000) related to externally generated costs for the development of a new generation printhead platform. These assets were in the course of construction at the reporting date and consequently were not amortised during the year.

The customer relationships intangible asset, which arose on the acquisition of the FFEI business, has been fully impaired during 2024. This resulted in an impairment expense of £502,000 (2023: nil). By the end of 2024 the FFEI business has been restructured. The printbar business has been transferred to Printhead and the remainder of the business has ceased. The customer relationships, identified on acquisition, related to label printing products which have subsequently been discontinued.

Amortisation is recorded in selling, general and administrative expenses. The amortisation periods are in line with the accounting policy in Note 2.

At 31 December 2024 the group had entered in to contractual commitments of £nil (2023: £112,000) for the acquisition of intangible assets.

17. Property, plant and equipment

	Land & buildings £'000	Leasehold improvements £'000	Plant and machinery £'000	Furniture, fittings and equipment £'000	Total £'000
Cost					
At 1 January 2023	2,165	13,902	68,941	5,192	90,200
Additions in the year	–	329	1,099	67	1,495
Disposals in the year	–	(25)	(3,033)	(5)	(3,063)
Exchange differences	(110)	(4)	(169)	(28)	(311)
At 31 December 2023	2,055	14,202	66,838	5,226	88,321
Additions in the year	–	112	801	24	937
Disposals in the year	–	(7)	(493)	(742)	(1,242)
Exchange differences	29	–	36	(7)	58
At 31 December 2024	**2,084**	**14,307**	**67,182**	**4,501**	**88,074**
Accumulated depreciation and impairment					
At 1 January 2023	564	9,549	60,214	3,769	74,096
Charge in the year	26	672	1,688	528	2,914
Disposals in the year	–	(25)	(3,009)	(5)	(3,039)
Exchange differences	(29)	(3)	(131)	(16)	(179)
At 31 December 2023	561	10,193	58,762	4,276	73,792
Charge in the year	26	671	1,605	449	2,751
Impairment	–	2	11	99	112
Disposals in the year	–	(12)	(360)	(745)	(1,117)
Exchange differences	12	–	179	(145)	46
At 31 December 2024	**599**	**10,854**	**60,197**	**3,934**	**75,584**
At 31 December 2023	1,494	4,009	8,076	950	14,529
At 31 December 2024	**1,485**	**3,453**	**6,985**	**567**	**12,490**

Included within Plant and Machinery is £586,000 (2023: £415,000) of assets under construction.

Capital commitments at 31 December 2024 amounted to £nil (2023: £14,000).

18. Leases

The Group has lease contracts for various items of buildings, equipment and vehicles used in its operations. The Group's obligations under its leases are secured by the lessor's title to the leased assets.

Generally, the Group is restricted from assigning and subleasing the leased assets. The Group also has certain leases of machinery with lease terms of 12 months or less and leases of office equipment with low value. The Group applies the 'short-term lease' and 'lease of low-value assets' recognition exemptions for these leases.

Right-of-use assets

	Buildings £'000	Equipment £'000	Vehicles £'000	Total £'000
Cost				
At 1 January 2023	12,639	125	24	12,788
Additions	852	–	–	852
Exchange differences	(21)	–	–	(21)
At 31 December 2023	13,470	125	24	13,619
Rental modification	(263)	–	–	(263)
Additions	283	–	–	283
Disposals	(2,611)	(71)	–	(2,682)
Exchange differences	2	–	–	2
At 31 December 2024	**10,881**	**54**	**24**	**10,959**
Depreciation				
At 1 January 2023	4,641	75	4	4,720
Charge in the year	1,057	19	8	1,084
Exchange differences	(11)	–	–	(11)
At 31 December 2023	5,687	94	12	5,793
Charge in the year	1,029	13	8	1,050
Impairment	272	–	–	272
Disposals	(818)	(71)	–	(889)
Exchange differences	(1)	–	–	(1)
At 31 December 2024	**6,169**	**36**	**20**	**6,225**
At 31 December 2023	7,783	31	12	7,826
At 31 December 2024	**4,712**	**18**	**4**	**4,734**

Lease deposits

A refundable deposit of SEK 1,237,500 (£104,000) is held on the lease for office premises in Sweden. This deposit would be due for repayment on expiry of the lease, currently due to expire in 2026. This receivable is presented within non-current financial assets on the Consolidated Statement of Financial Position.

Lease liabilities

Lease liabilities are analysed as follows:

	31 December 2024 £'000	31 December 2023 £'000
Current	**1,218**	1,800
Non-current	**4,710**	6,898
	5,928	8,698

18. Leases continued

Lease liabilities continued

The movement in lease liabilities is shown below:

	31 December 2024 £'000	31 December 2023 £'000
At 1 January	**8,698**	8,832
Additions	**490**	827
Disposals	**(2,289)**	–
Interest charge	**244**	261
Lease payments	**(1,197)**	(1,188)
Exchange differences	**(18)**	(34)
At 31 December	**5,928**	8,698

Maturity analysis of lease liabilities:

	31 December 2024 £'000	31 December 2023 £'000
Amounts falling due within		
Less than one year	**1,442**	1,175
Between one and five years	**3,985**	5,498
Later than five years	**2,058**	3,171
	7,485	9,844

Amounts recognised in the Consolidated Income Statement:

	31 December 2024 £'000	31 December 2023 £'000
Depreciation	**1,050**	1,084
Interest charge	**244**	261
Short-term lease expenses	**38**	24
	1,332	1,369

19. Deferred tax assets

	Accelerated capital allowances £'000	Share-based payments £'000	Acquired intangible assets £'000	Losses £'000	Other temporary differences £'000	Total £'000
At 1 January 2023 restated	(377)	1	(953)	1,928	154	753
(Charge) / credit to income statement restated	(150)	(1)	347	(789)	422	(171)
Foreign exchange movement on translation	–	–	–	–	(2)	(2)
At 31 December 2023 restated	(527)	–	(606)	1,139	574	580
(Charge) / credit to income statement	(25)	–	488	(404)	301	360
Foreign exchange movement on opening balance	–	–	–	–	12	12
At 31 December 2024	**(552)**	**–**	**(118)**	**735**	**886**	**951**

Unrecognised deferred tax assets

The Group has unrecognised deferred tax assets totalling £29,546,000 (2023: £30,236,000). These consist of the following:

19. Deferred tax assets continued

Trading losses

Deferred tax assets are recognised for tax loss carry forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable.

As at 31 December 2024, the Group had unused UK trading losses of £113,917,000 (2023: £112,888,000) available to offset against future UK taxable profits of the same trade. These losses may be carried forward indefinitely.

Whilst the Board believes in the long-term potential and profitability of the Printhead business unit, forecast taxable losses over the immediately foreseeable period mean that the UK trading losses will not be utilised in the short term. The impact of climate change has been considered in the forecast and valuation of future taxable profits and no impacts were noted. Therefore, no deferred tax asset has been recognised in respect of these.

As at 31 December 2024, the Group has an unrecognised deferred tax asset in respect of carried forward UK trading losses of £28,078,000 (2023: £28,222,000).

Capital losses

As at 31 December 2024, the Group has unused capital losses of £1,131,000 (2023: £1,131,000) available for offset against future chargeable gains. No deferred tax asset has been recognised in respect of these capital losses as it is not considered probable that there will be future chargeable gains available. As a result, the Group has an unrecognised deferred tax asset in respect of carried forward UK capital losses of £283,000 (2023: £283,000).

These losses may be carried forward indefinitely.

Other temporary differences

As at 31 December 2024, the Group has £1,185,000 (2023: £1,631,000) of unrecognised deferred tax assets relating to decelerated capital allowances £731,000 (2023: £851,000), share options £83,000 (2023: £660,000) and various, sundry trading items £371,000 (2023: £120,000). Deferred tax assets arising in these areas have only been recognised to the extent that they offset deferred tax liabilities held by the Group.

20. Inventories

	31 December 2024 £'000	31 December 2023 £'000
Raw materials	**8,054**	12,426
Work in progress	**5,436**	4,317
Finished goods	**13,746**	14,292
	27,236	31,035

Cost of inventories recognised as an expense and write down of inventories recognised as an expense (and which are included as part of Cost of Sales) are set out in Note 7.

Gross inventory costs are £33,021,000 (2023: £35,680,000) partially offset by provisions of £5,784,000 (2023: £4,645,000).

There is no specific impact on the valuation of the Group's inventories arising from climate related matters. Estimates are based upon the most reliable evidence available at the time the estimates are made.

21. Trade and other receivables

	31 December 2024 £'000	31 December 2023 £'000
Amounts receivable for the sale of goods and services	**6,089**	7,301
Less: provision for bad and doubtful debts	**(188)**	(115)
	5,901	7,186
Other receivables	**698**	367
Prepayments	**1,485**	1,249
	8,084	8,802

21. Trade and other receivables continued

Ageing of trade receivables

	31 December 2024			31 December 2023		
	Gross £'000	**Provision £'000**	**Net £'000**	Gross £'000	Provision £'000	Net £'000
Not past due	**4,746**	**(5)**	**4,741**	5,446	–	5,446
Past due						
0 to 30 days	**409**	**(5)**	**404**	1,324	(7)	1,317
30 to 60 days	**294**	**(7)**	**285**	161	(0)	161
60 to 90 days	**51**	**(6)**	**45**	175	(1)	174
More than 90 days	**589**	**(165)**	**424**	195	(107)	88
	1,343	**(183)**	**1,160**	1,855	(115)	1,740
Total receivables	**6,089**	**(188)**	**5,901**	7,301	(115)	7,186

Movement in provision for bad and doubtful debts

	31 December 2024 £'000	31 December 2023 £'000
Balance at beginning of year	**(115)**	(125)
impairment losses recognised in the income statement	**(73)**	(99)
Amounts written off	**1**	108
Exchange differences	**(1)**	1
	(188)	(115)

The average credit period taken on sales of goods is 35 days (2023: 37 days). No interest is charged on the receivables for the period agreed in the Requirements Contract or, if not specified or applicable, the first 30 days from the date of the invoice. Thereafter, the Group reserves the right to charge interest at a daily rate from 1.5% to the greater of 4.0% per annum above the base rate of the Bank of England from time to time, or the maximum rate of interest allowable under the Late Payment of Commercial Debts (Interest) Act 1998, on all sums outstanding until payment in full is received. Trade receivables over 120 days are provided for based on estimated irrecoverable amounts from the sale of goods, determined by reference to past default experience. The maximum exposure to credit risk is the carrying amount of the financial assets as disclosed in the liquidity section of note 29. Before accepting any new customer, the Group uses an external credit scoring system to assess the potential customer's credit quality and defines credit limits by customer. Credit limits are reviewed at least once per year. Of the trade receivables balance at the end of the year, six (2023: five) customers each represented greater than 5% (2023: 5%) of the total receivables balance, totalling £2,236,000 (2023: £3,268,000). The total due from these customers represents 4% (2023: 5%) of the Group's revenue.

The Group has recognised a loss allowance of 1% for receivables aged 60 days or less, 5% for receivables aged between 61 and 90 days and 15% for 91 and 120 days. A loss allowance of 25% is applied for receivables aged over 120 days. The loss allowance calculation excludes receivables with a specific provision. Most of the debt over 120 days has been provided in full and relates to a small number of customers where none of the debt is expected to be recovered through normal trading. A provision is made against trade receivables until such time as the Group believes the amount to be irrecoverable (such as the bankruptcy of a customer or emerging market risks, which would render the receivable irrecoverable), after which the trade receivable balance is written off.

The Directors consider that the carrying amount of trade and other receivables approximates their fair value.

22. Contract assets and contract liabilities

	31 December 2024 £'000	31 December 2023 £'000
Contract assets		
– Accrued income	**1,018**	2,156
Total current contract assets	**1,018**	2,156

Contract assets consist of a small number of contracts relating to the design and production of bespoke machinery or research and development services. Since there is regular contact with all such customers for project management purposes, with robust milestone payments, there is no risk in relation to the recoverability of contract assets. The only time when an expected credit loss provision would be recognised is where the Group becomes aware of a customer being at risk of bankruptcy. The Directors are not aware of any such cases at 31 December 2024 (31 December 2023: none), therefore, no such provision is in place. There was a unique one off situation related to a contract from 2021 where we are unable to meet customer requirements, this has been provided for, see (vii) of Note 9.

22. Contract assets and contract liabilities continued

	31 December 2024 £'000	31 December 2023 £'000
Contract liabilities		
– Deferred income	**(241)**	(350)
– Customer deposits	**(1,745)**	(2,019)
Total current contract liabilities	**(1,986)**	(2,369)

Both deferred income and customer deposits represent consideration received for performance obligations not yet satisfied under contracts to deliver products or services to customers. All deferred income and customer deposits are anticipated to be recognised in revenue within the next financial year.

Of the £2,369,000 recognised as contract liabilities as at 31 December 2023, £2,079,000 was recognised in revenue during the year ended 31 December 2024.

23. Trade and other payables

	31 December 2024 £'000	31 December 2023 £'000
Amounts falling due within one year		
Trade payables	**(2,787)**	(4,299)
Accruals and other payables	**(5,995)**	(5,269)
	(8,782)	(9,568)

At 31 December 2024, the Group had an average of 23 days of purchases (31 December 2023: 31 days) outstanding in trade payables and accruals. The Group has financial risk management policies in place to ensure that all payables are paid within the credit timetable.

The Directors consider that the carrying amount of trade and other payables approximates to their fair value.

24. Deferred consideration

	31 December 2024 £'000	31 December 2023 £'000
Balance at 1 January	**(2,115)**	(3,740)
Cash settlement	**2,133**	1,746
Foreign exchange and other non-cash movements	**(18)**	(121)
Balance at 31 December	**–**	(2,115)

Deferred consideration related to the acquisition of FFEI Limited in 2021 and the acquisition of Megnajet Limited and Technomation Limited in 2022.

FFEI Limited

In July 2021, the Group acquired 100% of the issued share capital of FFEI Limited for total consideration of £8,762,000. This comprised of £3,907,000 initial cash consideration as well as deferred consideration measured at £4,855,000 (being the net present value of the total amount payable of £5,200,000 discounted at 3.49%).

This deferred consideration was payable in equal instalments over the course of three years from the date of acquisition. The final instalment of £1,733,000 was paid in 2024.

Megnajet Limited and Technomation Limited

In March 2022, the Group acquired 100% of the issued share capital of Megnajet Limited and Technomation Limited for total consideration of £2,456,000. This comprised of £2,269,000 initial cash consideration as well as deferred consideration measured at £187,000 each for Megnajet and Technomation (being undiscounted amounts of £200,000).

The final amounts of £200,000 for each company were paid in 2024.

25. Provisions

	31 December 2024 £'000	31 December 2023 restated £'000
Current		
Warranty provisions	**(338)**	(476)
Restructuring provisions	**–**	(496)
Legal provision	**(613)**	(413)
	(951)	(1,385)
Non-current		
Dilapidations	**(300)**	(300)
	(300)	(300)

Movement in provisions during the year

	Legal provision £'000	Warranty provision £'000	Restructuring provision £'000	Dilapidations £'000	Total £'000
At 1 January 2023 (restated)	(130)	(312)	(93)	(300)	(835)
Provided for during the year (restated)	(283)	(373)	(645)	–	(1,301)
Provisions utilised	–	93	242	–	335
Provisions released	–	116	–	–	116
At 31 December 2023 (restated)	(413)	(476)	(496)	(300)	(1,685)
Provided for during the year	(200)	(41)	–	–	(241)
Provisions utilised	–	135	492	–	627
Provisions released	–	44	4	–	48
At 31 December 2024	**(613)**	**(338)**	**–**	**(300)**	**(1,251)**

In January 2025, we identified a historical breach of employment law regulations within one of our operations dating back to 2021. Following a comprehensive investigation, we have assessed the potential liability associated with this matter to be approximately £613,000 excluding any legal fees. Refer note 32 for the prior period restatement.

The warranty and commercial agreements provision represents management's best estimate of the Group's liability related to claims against product warranties or commercial sales agreements. The timing of the utilisation of this provision is uncertain.

Restructuring provisions in both the current and prior years consist of redundancy costs arising in the context of the Group's streamlining of operations.

The Group operates from a number of leasehold premises under full repairing leases. The dilapidation provision recognised reflects the estimated costs of repairs that would be required to put these premises back into the state of repair required under these leases.

26. Borrowings

	31 December 2024 £'000	31 December 2023 £'000
Amounts failing due within one year		
Invoice discounting facility	**(557)**	(1,403)

Invoice discounting facility

The facility limit is £3 million (2023: £3 million) and operates on a rolling basis from the original inception date of September 2022. The facility can be cancelled with a three-month notice period. There are no covenants attached to the invoice discounting facility.

Interest on the invoice discounting facility is charged daily when the facility is in an overdrawn position at a rate equivalent to the appropriate base rate +1.75% pa. There is an annual service fee of £25,000 charged monthly, and there was a one-off arrangement fee to open the facility of £10,000. No interest is payable on the unutilised element on the facility.

Eligible debts in GBP and USD denominations are legally assigned to the facility provider as, or soon after, they are raised. The facility makes available 90% of the debts to XaarJet Limited, subject to certain monetary funding limits and concentration percentages by customer. XaarJet Limited remain responsible for collecting the debts as the collection agent for the finance provider and the remittances are made into an account held for the benefit of the finance provider, the balance of which is held as a liability in XaarJet Limited.

No fair value adjustments are deemed necessary for these amounts; however, the receivables are subject to an allowance for doubtful debt. The invoice discounting facility is secured with fixed rate charges over purchased debts and a floating charge over the assets of XaarJet Limited.

It remains the Group's responsibility to appropriately insure, manage and recover the debts assigned under the arrangement, and the transferred assets are subject to recourse at any time. As a result, the Group retains substantially all the risks/rewards of ownership and control of these assets. Therefore, the Group continues to recognise the gross debts assigned under the facility as trade receivables.

Committed facilities

On 14 June 2023, Xaar Plc entered into a Revolving Credit Facility (RCF) agreement of £5 million, which matures on 14 June 2026, having been extended for an additional year in January 2025. The agreement includes an accordion option of a further £2.5 million which can be requested at any time during the facility term, subject to lender approval and relevant fees. The facility as at 31 December 2024 remained undrawn (2023: undrawn).

The facility bears a floating interest rate of the Sterling Overnight Indexed Average (SONIA) rate plus 2.35% margin. A non-utilisation fee of 40% of the margin is chargeable on undrawn and uncancelled amounts.

The facility is secured by fixed and floating charges over the assets of the Group.

The Group is subject to financial covenants under the facility and has complied with these at all testing points.

27. Share capital and reserves

Share capital

	31 December 2024		31 December 2023	
	£'000	**Number**	£'000	Number
Authorised, issued and fully paid:				
At as 1 January	**7,923**	**79,230,005**	7,844	78,446,230
Shares issued during the year (ordinary shares of 10.0p each)	**25**	**249,184**	79	783,775
As at 31 December	**7,948**	**79,479,189**	7,923	79,230,005

The Company has one class of ordinary shares which carries no right to fixed income.

Retained earnings

Comprises all net gains and losses as well as transactions with owners, such as dividend payments, that are not recognised elsewhere. Amounts are distributable by way of dividends.

The share-based payments reserve, which represents the cumulative charges recognised in relation to equity-settled share option awards, are presented in retained earnings.

Merger reserve

Comprises the premium on shares issued as consideration for Xaar Technology Limited where conditions for merger relief have been satisfied. This is not distributable by way of dividends. These are presented as part of other reserves in the Statement of Changes in Equity.

Non-distributable reserve

Comprises the non-distributable portion of the dividend received by Xaar Plc from Xaar Digital Limited. These are presented as part of other reserves in the Statement of Changes in Equity.

Own shares reserve

Represents shares in the Company held by Xaar Trustee Limited and Xaar Plc ESOP Trust. These shares are held in order to satisfy options granted under the Group's share option schemes.

	31 December 2024		31 December 2023	
	Nominal value £'000	**Number**	Nominal value £'000	Number
Own shares	**566**	**313,201**	566	313,201

Of the nominal value £20,000 (2023: £20,000) represents 91,250 ordinary shares held in trust by Xaar Trustee Limited. The remaining value £545,733 (2023: £545,733) represents 221,951 (2023: 221,951) shares in the Company purchased in the market at market value and held by the Xaar plc ESOP Trust.

During the year the ESOP Trust sold nil (2023: 85,459) shares to satisfy options exercised and purchased nil (2023: nil) shares.

Translation reserve

Represents exchange differences on translation of overseas operations.

Notes to the consolidated financial statements continued
for the year ended 31 December 2024

28. Notes to the cash flow statement

	Notes	31 December 2024 £'000	31 December 2023 restated £'000
Loss before taxation		**(11,425)**	(2,717)
Adjustments for:			
Depreciation and impairment of property, plant and equipment	17	**2,863**	2,914
Depreciation and impairment of right-of-use assets	18	**1,322**	1,084
Amortisation and impairment of intangible assets	16	**2,321**	1,487
Research and development expenditure credit	9	**(228)**	(179)
Net interest expense		**361**	473
Unrealised currency translation (gains) / losses		**(130)**	426
Share-based payment charge	30	**1,096**	1,882
Fair value loss on financial assets at FVTPL	29	**5,561**	369
Loss on disposal of property, plant and equipment	7	**126**	24
Gain on disposal of intangible assets	16	**–**	(2,036)
(Decrease) / increase in provisions	25	**(434)**	864
Operating cash flows before movements in working capital		**1,433**	4,591
Decrease / (increase) in inventories		**3,846**	(2,057)
Decrease in receivables		**1,886**	942
Decrease in payables		**(1,172)**	(5,013)
Cash generated / (utilised) by operations		**5,993**	(1,537)

Analysis of changes in net debt

	Cash and cash equivalents £'000	Lease liabilities* £'000	Borrowings* £'000	Deferred consideration* £'000	Net cash/(debt) £'000
Net debt as at 1 January 2023	8,546	(8,832)	(379)	(3,740)	(4,405)
Additions to leases	–	(827)	–	–	(827)
Cash flow	(1,227)	1,075	(915)	1,746	679
Foreign exchange and other non-cash movements	(184)	(114)	(109)	(121)	(528)
Net debt as at 31 December 2023	7,135	(8,698)	(1,403)	(2,115)	(5,081)
Additions to leases	–	(490)	–	–	(490)
Disposals	–	2,289	–	–	2,289
Cash flow	1,539	1,197	941	2,133	5,810
Finance charges	–	(244)	–	–	(244)
Foreign exchange gain / (loss)	37	18	(95)	(18)	(58)
Net debt as at 31 December 2024	**8,711**	**(5,928)**	**(557)**	**–**	**2,226**

Total financial liabilities included within net debt comprise of those items marked * and amount to £6,485,000 (2023: £12,216,000).

Liabilities arising from financing activities comprise the Group's RCF and invoice discounting facility (as set out in Note 26) and lease liabilities (as set out in Note 18).

29. Financial instruments

	Carrying and fair value	
	31 December 2024 £'000	31 December 2023 £'000
Financial instruments held at amortised cost		
Trade and other receivables	**6,598**	7,553
Contract assets	**1,018**	2,156
Cash and cash equivalents	**8,711**	7,135
Non-current financial assets	**104**	136
Trade and other payables	**(8,782)**	(9,568)
Borrowings and invoice discounting	**(557)**	(1,403)
Lease liabilities	**(5,928)**	(8,698)
Deferred consideration	**–**	(2,115)
Financial instruments held at fair value		
Financial asset at FVTPL	**4,918**	10,599

The Directors consider there to be no material difference between the carrying value and the fair value of the financial instruments classified as held at amortised cost. For the items classified as held at fair value, the fair value is recognised in the Consolidated Statement of Financial Position as the carrying amount.

Financial instruments held at fair value

The Group has one financial instrument held at fair value through profit/loss (FVTPL), the contingent consideration that arose on the Group's divestment of its remaining interest in Xaar 3D Limited during the year ended 31 December 2021

In 2021, Xaar 3D Holdings Limited completed the divestment of its remaining interest in the share capital of Xaar 3D Limited. The Group received net cash consideration of £9,272,000 as well as a potential entitlement to additional cash consideration of up to £10,863,000 calculated on an earn-out basis at 3% of revenue per annum, with additional amounts becoming receivable on meeting revenue milestones.

During 2024 the fair value of the contingent consideration has been considerably reduced. This is due to a reduction in the revenue forecasts for the disposed business which have resulted in the final revenue milestone (Milestone 3) no longer being expected to be achieved before the milestone window closes on 6 Oct 2026. Management view is that Milestone 2 will be received in late 2025 or early 2026.

Financial instruments that are measured at fair value are classified using a fair value hierarchy that reflects the source of inputs used in deriving the fair value. The three classification levels are

+ Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
+ Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
+ Level 3: from valuation techniques that include inputs for the asset or liability that are not based on observable market data (i.e. unobservable market inputs).

The financial asset measured at FVTLP is deemed to be a Level 3 instrument. Fair value is determined using a Monte Carlo Simulation with significant unobservable inputs being the 20% (2023: 20%) revenue volatility and the 10% (2023: 10%) risk-adjusted discount rate. Fair value movements are recognised in the Consolidated Income Statement in selling, general and administrative expenses.

Sensitivity observations on these two inputs show that a +/-1,000bps change in revenue volatility would result in £2,000 decrease and £2,000 increase respectively and a +/ – 100bps change in discount rate would result in £144,000 decrease and £159,000 increase in fair value respectively.

The financial asset at FVPTL is deemed to be a Level 3 instrument. Fair value is determined using a Monte Carlo Simulation with significant unobservable inputs being the 20% (2023: 20%) revenue volatility and the 10% (2023: 10%) risk-adjusted discount rate. Fair value movements are recognised in the Consolidated Income Statement in selling, general and administrative expenses.

Sensitivity observations on these two inputs show that a +/-1,000bps change in revenue volatility would result in £2,000 decrease and £2,000 increase respectively and a +/ – 100bps change in discount rate would result in £143,588 decrease and £158,744 increase in fair value respectively.

Movements in the year are as follows:	**31 December 2024 £'000**	31 December 2023 £'000
Balance at 1 January	**10,599**	11,606
Earn out received	**(120)**	(140)
Milestone consideration received	**–**	(497)
Fair value loss on financial assets at FVTPL*	**(5,561)**	(370)
Balance at 31 December	**4,918**	10,599
Current	**1,855**	2,322
Non-current	**3,063**	8,277
Balance at 31 December	**4,918**	10,599

* includes foreign exchange rate movements

29. Financial instruments continued

Capital risk management

The capital structure of the Group comprises of cash and cash equivalents, an Invoice Discounting Facility of £3 million which operates for a minimum twelve month from its inception in September 2022, a Revolving Credit Facility of £5 million (with a £2.5 million additional accordion option) that has a maturity date of June 2026 and equity attributable to the owners of the Company.

The Group maintains a capital structure with the following objectives:

+ to protect the ability of the Group to continue as a going concern and maintain sufficient available resources as protection for unforeseen events;
+ to provide flexibility of resource for strategic growth and investment where opportunities arise; and
+ to provide reasonable returns to shareholders whilst maintaining a limited level of risk.

As part of achieving these objectives the Group identifies the principal financial risk exposures that are created by the Group's financial instruments and monitors them on a regular basis. These are considered to be foreign currency risk (a component of market risk), interest rate risk, credit risk and liquidity risk.

The Group monitors capital using a gearing ratio, which is determined as the proportion of debt to equity. Debt is defined as all long-term and short-term borrowings except for lease liabilities. Equity includes all capital and reserves of the Group attributable to the equity holders of the parent. The Group's policy for its existing business is to use debt where appropriate, whilst maintaining the gearing ratio at a level under 10%. The gearing ratio is as follows:

	31 December 2024 £'000	31 December 2023 £'000
Borrowings (excluding lease liabilities)	**557**	1,403
Equity	**62,182**	71,831
Gearing ratio	**1%**	2%

Foreign currency risk

This is the risk that a change in currency rates causes an adverse impact on the Group's performance or financial position.

The Group receives approximately 41% of its revenues in US Dollars and 7% of its revenue in Euros, which are partially naturally hedged by supplies in these currencies; the remainder requires conversion into Sterling in order to fund the remaining costs of the Group's UK operations. The Group has R&D operations in Sweden, therefore, also incurs costs and holds cash balances in Swedish Krona.

The Group is mainly exposed to foreign currency risk resulting from transactions in US Dollars, Euros and Swedish Krona. The following table demonstrates the Group's sensitivity to a 10% increase and decrease in the Sterling exchange rate against the relevant foreign currencies on the Group's profit before tax and equity (due to changes in the fair value of monetary assets and liabilities). 10% represents management's assessment of the reasonably possible movement in exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 10% change in foreign currency rates. The sensitivity analysis includes intercompany balances within the Group where the denomination of the balance is in a currency other than the functional currency of the debtor or the creditor. A positive number below indicates an increase in profit or equity.

	Euro currency impact		US Dollar currency impact		Swedish Krona currency impact	
	+10% £'000	–10% £'000	+10% £'000	–10% £'000	+10% £'000	–10% £'000
31 December 2024						
Equity	**(41)**	**50**	**(1,713)**	**2,093**	**26**	**(31)**
31 December 2023						
Equity	(54)	66	(1,436)	1,756	35	(43)

Interest rate risk

The Group's borrowing facilities, including its invoice discounting facilities, are linked to the Bank of England base rate for GBP values, and the Federal Bank base rate for USD values. An increase in these benchmarks would impact the Group's cost of borrowing which, in turn, would affect the Group's financial performance. Based on the invoice discounting facility balance at the year end, if interest rates had fluctuated +/ – 100bps, and all other variables were held constant, the Group's profit for the year ended 31 December 2024 would decrease by £3,000 or increase by £3,000 respectively. There would be no effect on equity reserves.

	2024				2023			
	Fixed rate financial liabilities £'000	Floating rate financial liabilities £'000	Interest free financial liabilities £'000	Total £'000	Fixed rate financial liabilities £'000	Floating rate financial liabilities £'000	Interest free financial liabilities £'000	Total £'000
Lease liabilities	**(5,928)**	**–**	**–**	**(5,928)**	(8,698)	–	–	(8,698)
Invoice discounting facility	**–**	**(557)**	**–**	**(557)**	–	(1,403)	–	(1,403)
Trade and other payables	**–**	**–**	**(8,782)**	**(8,782)**	–	–	(9,568)	(9,568)
Deferred consideration	**–**	**–**	**–**	**–**	–	–	(2,115)	(2,115)

29. Financial instruments continued

Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties and insuring the suppliers, as a means of mitigating the risk of financial loss from defaults.

Trade receivables consist of a large number of customers, spread across different industries and geographical areas. Ongoing credit evaluation is performed on the financial condition of accounts receivable.

The credit risk on liquid funds is limited because the counterparties are banks with high credit ratings assigned by international credit rating agencies. Additional credit insurance coverage is maintained where appropriate against agreed credit terms with customers.

Further information on the Group's trade receivable ageing and impairment can be found in Note 21.

Liquidity risk

This is the risk that the Group will have insufficient funds available in the right currency to settle its obligations as they fall due.

The Group aims to mitigate liquidity risk by managing cash generation by its operations and applying cash collection targets throughout the Group. Investment is carefully controlled, with authorisation limits operating up to Group Board level and cash payback periods applied as part of the investment appraisal process. In this way the Group aims to maintain a good credit rating to facilitate fund raising.

In order to mitigate the Group's liquidity risks, the Group can choose to fund significant fixed asset purchases by finance leases repayable over a period of three to five years dependent on the individual asset being financed and interest-bearing loans.

In its funding strategy, the Group's objective is to maintain a balance between continuity of funding and flexibility through the use of overdrafts, bank loans, finance leases and hire purchase contracts. The Group manages liquidity risk by maintaining adequate reserves and banking facilities by continuously monitoring cash flows and matching the maturity profiles of financial assets and liabilities.

On 14 June 2023, Xaar PLC entered into a Revolving Credit Facility (RCF) agreement of £5 million, which matures on 14 June 2025, with an option to extend for a further year, subject to lender approval. The agreement includes an accordion option of a further £2.5 million which can be requested at any time during the facility period, subject to lender approval and relevant fees. The facility as at 31 December 2024 remained undrawn (2023: undrawn).

The Group's policy is to invest any excess cash used in managing liquidity in financial instruments exposed to insignificant risk of changes in market value, being placed on interest-bearing deposit with maturities no more than 12 months.

The maturity profile of financial liabilities shown below represents the Group's gross expected contractual cash flows.

	Less than one year £'000	**Between one and five years £'000**	**Over five years £'000**	**Total £'000**
31 December 2024				
Trade and other payables	**8,782**	**–**	**–**	**8,782**
Invoice discounting facility	**557**	**–**	**–**	**557**
Lease rental payments	**1,442**	**3,985**	**2,058**	**7,485**
Deferred consideration	**–**	**–**	**–**	**–**

	Less than one year £'000	Between one and five years £'000	Over five years £'000	Total £'000
31 December 2023				
Trade and other payables	9,568	–	–	9,568
Invoice discounting facility	1,403	–	–	1,403
Lease rental payments	1,175	5,498	3,171	8,669
Deferred consideration	2,115	–	–	2,115

30. Share-based payments

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 £'000
Equity-settled share-based payments expense	**1,097**	1,882
Cash-settled share-based payments expense	**–**	–
	1,097	1,882

The Group operates a number of share schemes for certain employees of the Group as follows:

+ 2017 Share save scheme (SAYE);
+ 2007 Long term incentive plan (LTIP);
+ 2017 Long term incentive plan (LTIP); and
+ 2020 Deferred bonus plan (DBP).

Options or conditional share grants under each scheme have been aggregated.

Vesting periods range from one to four years. Where options remain unexercised after a period of ten years from the date of grant, or forty-two months in the case of the share save scheme, they expire and are no longer exercisable. Options are forfeited if the employee leaves the Group before they vest, save where the employee is deemed to be a 'good leaver', in which case options awarded are pro-rated to the leaving date.

Save as You Earn Scheme

	Year ended 31 December 2024		Year ended 31 December 2023	
	Number	Weighted average exercise price pence	Number	Weighted average exercise price pence
Outstanding at beginning of year	**1,547,502**	**134p**	1,905,927	116p
Granted	**499,954**	**80p**	494,309	140p
Forfeited	**(841,090)**	**133p**	(173,039)	127p
Exercised	**(67,818)**	**94p**	(679,695)	121p
Outstanding at end of year	**1,138,548**	**113p**	1,547,502	134p
Number of options exercisable at end of year	**112,033**	**129p**	84,948	95p

	Year ended 31 December 2024	Year ended 31 December 2023
Weighted average fair value of options granted	**38p**	81p
Weighted average share price at date of exercise	**130p**	91p
Weighted average remaining contractual life	**2 years**	2 years

The inputs into the Black-Scholes model are as follows:

	Year ended 31 December 2024	Year ended 31 December 2023
Date of grant	**1 November 2024**	9 November 2023
Share price at grant (pence)	**88p**	170p
Exercise price	**80p**	140p
Expected volatility	**50.3%**	52.8%
Risk-free rate	**4.3%**	4.3%
Contractual life (years)	**3.33 years**	3.31 years

Expected volatility was determined by calculating the historical volatility of the Group's share price over periods ranging from the previous one to three years. The expected life used in the model has been adjusted, based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations.

30. Share-based payments continued

Long-Term Incentive Plans

	Year ended 31 December 2024 Number	Year ended 31 December 2023 Number
Outstanding at beginning of year	**3,582,275**	3,009,441
Granted	**1,462,281**	1,160,074
Forfeited	**(792,708)**	(408,271)
Exercised	**(176,219)**	(178,969)
Outstanding at end of year	**4,075,629**	3,582,275
Number of options exercisable at end of year	**1,410,759**	283,849

	Year ended 31 December 2024	Year ended 31 December 2023
Weighted average fair value of options granted	**88p**	162p
Weighted average share price at date of exercise	**132p**	173p
Weighted average remaining contractual life	**8 years**	7 years

Fair values of the awards with a performance condition based on non-market conditions, for example earnings per share, are calculated using the Black-Scholes model. The inputs into the models for awards granted in the current and prior years were as follows:

	Year ended 31 December 2024	Year ended 31 December 2023	
Date of grant	**29 April 2024**	1 November 2023	9 May 2023
Share price at grant (pence)	**115p**	168p	186p
Expected volatility	**51.5%**	n/a	56.8%
Risk-free rate	**4.2%**	n/a	3.8%
Contractual life (years)	**3.00 years**	1.17 years	2.91 years

All LTIP awards are subject to achievement of the performance conditions and can be exercised up to ten years after the grant date. Save as permitted in the LTIP rules, awards lapse on an employee leaving the Group.

Deferred bonus plan

Under the Group's deferred bonus plan, the Executive Directors are awarded an annual bonus, 70% is achieved in cash and 30% is awarded in the form of shares for which there is a compulsory holding period of two years and a requirement for continued employment before these fully vest to the employees (deferred shares).

	Year ended 31 December 2024 Number	Year ended 31 December 2023 Number
Outstanding at beginning of year	**98,187**	52,731
Granted	**–**	45,456
Forfeited	**–**	–
Exercised	**–**	–
Outstanding at end of year	**98,187**	98,187
Number of options exercisable at end of year	**34,098**	–

	Year ended 31 December 2024	Year ended 31 December 2023
Weighted average fair value of options granted	**n/a**	186p
Weighted average share price at date of exercise	**n/a**	n/a
Weighted average remaining contractual life	**8 years**	9 years

30. Share-based payments continued

Deferred bonus plan continued

Fair values of the awards with a performance condition based on non-market conditions, for example earnings per share, are calculated using the Black-Scholes model. The inputs into the models for awards granted in the current and prior years were as follows:

	Year ended 31 December 2024	Year ended 31 December 2023
Date of grant	**n/a**	9 May 2023
Share price at grant (pence)	**n/a**	186p
Exercise price	**n/a**	nil
Expected volatility	**n/a**	n/a
Risk-free rate	**n/a**	n/a
Contractual life (years)	**n/a**	1.91 years

31. Retirement benefit schemes

The UK based employees of the Group's UK companies have the option to be members of a defined contribution pension scheme managed by a third party pension provider. For each employee who is a member of the scheme, the Group contributes a fixed percentage of each employee's salary to the scheme. The only obligation of the Group with respect to this scheme is to make the specified contributions.

In addition to the above, the Group complies with all retirement benefit scheme requirements in all other jurisdictions in which it has employees.

The total cost charged to the Consolidated Income Statement in respect of all of the Group's retirement benefit schemes during the year was £1,159,000 (2023: £1,407,000). As at 31 December 2024 contributions of £198,000 (2023: £129,000) due in respect of the current reporting period had not been paid over to the schemes.

32. Restatement of prior period

In January 2025, we identified a historical breach of employment law regulations within one of our operations dating back to 2021. Following a comprehensive investigation, we have assessed the potential liability associated with this matter to be approximately £613,000 excluding any legal fees. Xaar has established appropriate provisions in our financial statements to address this obligation. The provision is reflected in note 25 under 'legal provision'. Note that this item is considered an adjusting item in both current and previous periods and is reflected in note 9.

It was further identified that in preparing the 2023 consolidated financial statements, intercompany revenues were not fully eliminated in the Ink Supply Systems CGU. This overstated Group revenues and cost of sales by £373,000, but had no net impact on profits. The error related solely to point in time revenues. There is no impact on the statement of financial position.

The errors have been corrected by restating each of the affected financial statement line items for the prior periods as follows:

	31 December 2023 £'000	Increase / (decrease) £'000	**31 December 2023 restated £'000**	31 December 2022 £'000	Increase / (decrease) £'000	**31 December 2022 restated £'000**
Consolidated statement of financial position (extract)						
Current provisions	(972)	(413)	**(1,385)**	(405)	(130)	**(535)**
Deferred tax asset	493	87	**580**	726	27	**753**
Translation reserve	1,310	8	**1,318**	1,628	(2)	**1,626**
Retained earnings	26,958	(334)	**26,624**	27,389	(101)	**27,288**
Total equity	71,831	(326)	**71,505**	71,769	(103)	**71,666**

32. Restatement of prior period continued

	2023	Profit increase / (decrease)	2023 restated	2022	Profit increase / (decrease)	2022 restated
Consolidated income statement (extract)						
Revenue	70,614	(373)	**70,241**	72,782	-	**72,782**
Cost of Sales	(43,723)	373	**(43,350)**	(44,138)	-	**(44,138)**
Selling, general and administrative expenses	(25,577)	(296)	**(25,873)**	(21,205)	(106)	**(21,311)**
Operating (loss) / profit	(1,948)	(296)	**(2,244)**	1,239	(106)	**1,133**
(Loss) / profit before tax – continuing operations	(2,421)	(296)	**(2,717)**	824	(106)	**718**
Tax credit	247	62	**309**	967	22	**989**
(Loss) / profit for the year – continuing operations	(2,174)	(234)	**(2,408)**	1,791	(84)	**1,707**
(Loss) / profit for the year attributable to the equity shareholder of the parent	(2,174)	(234)	**(2,408)**	1,632	(84)	**1,548**
Basic (loss)/earnings per share	(2.8)p	(0.2)p	**(3.0)p**	2.1p	(0.1)p	**2.0p**
Diluted (loss)/earnings per share	(2.8)p	(0.2)p	**(3.0)p**	2.0p	(0.1)p	**1.9p**
Consolidated statement of comprehensive income (extract)						
(Loss)/ profit for the year attributable to the equity shareholders of the parent	(2,174)	(234)	**(2,408)**	1,632	(84)	**1,548**
Exchange (losses) / gains on translation of foreign operations	(318)	10	**(308)**	617	(2)	**615**
Total comprehensive (expense)/income for the year	(2,492)	(224)	**(2,716)**	2,249	(86)	**2,163**

33. Contingent Liability

It has been identified that Pad Print Machinery of Vermont Inc has been responsible for environmental discharges for which it is not in possession of the necessary permits. This has been self-reported in Q1 2025 and investigations and testing are currently underway. Preliminary findings indicate that fines and remediation costs are expected to be immaterial.

34. Related party transactions

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

With the exception of transactions with Directors, there were no other transactions during either the current or preceding year with related parties who are not members of the Group. Details of the remuneration of the Directors is set out in the Directors' Remuneration Report on pages 57 to 68.

35. Subsidiary undertakings exempt from audit

The following subsidiaries, which are incorporated in England and Wales, are exempt from the requirements relating to the audit of individual financial statements for the year ended 31 December 2023 by virtue of Section 479A of the Companies Act 2006.

Company name	**Company registration number**
XaarJet Limited	03375961
XaarJet (Overseas) Limited	04312431
Xaar Technology Limited	02469592
Xaar Digital Limited	03588121
Xaar Trustee Limited	03025096
Xaar 3D Holdings Limited	03025096
Xaar 3D Holdings Limited	11425540
FFEI Limited	03244452
Megnajet Limited	07160441
Technomation Limited	05262517

36. Subsequent events

The Directors believe that there are no such events to report.

37. Ultimate controlling party

The Directors believe that there is no ultimate controlling party of the Group.

Company statement of financial position

as at 31 December 2024

	Notes	31 December 2024 £'000	31 December 2023 £'000
Non-current assets			
Right-of-use asset	C5	**709**	826
Investments in subsidiaries	C6	**97,041**	99,909
		97,750	100,735
Current assets			
Trade and other receivables	C7	**8,798**	4,909
Cash and cash equivalents		**61**	791
		8,859	5,700
Total assets		**106,609**	**106,435**
Current liabilities			
Trade and other payables	C8	**(24,473)**	(17,867)
Deferred consideration	C9	**–**	(2,115)
Provisions	C10	**–**	(4)
Lease liabilities	C5	**(91)**	(89)
		(24,564)	(20,075)
Net current liabilities		**(15,705)**	(14,375)
Non-current liabilities			
Lease liabilities	C5	**(510)**	(600)
Provisions	C10	**(250)**	(250)
		(760)	(850)
Total liabilities		**(25,324)**	(20,925)
Net assets		**81,285**	85,510
Equity			
Share capital	C12	**7,948**	7,923
Share premium		**30,011**	29,950
Own shares		**(546)**	(546)
Other reserves		**39,381**	38,630
Retained earnings		**4,491**	9,553
Total equity attributable to the equity shareholders of the parent		**81,285**	85,510

Xaar plc reported a loss for the financial year ended 31 December 2024 of £5,474,000 (2023: profit of £1,534,000).

The financial statements of Xaar Plc, registered number 3320972, were approved and authorised for issue by the Board of Directors on 24 March 2025. They were signed on its behalf by:

Andrew Herbert
Chairman
24 March 2025

Company statement of changes in equity

Year ended 31 December 2024

	Share capital £'000	Share premium account £'000	Own shares reserve £'000	Other reserves £'000	Retained earnings £'000	Total equity £'000
Balance as at 1 January 2023	7,844	29,427	(755)	38,003	6,902	81,421
Profit for the year	–	–	–	–	1,534	1,534
Total comprehensive income					**1,534**	**1,534**
Issue of ordinary shares	79	523	–	–	–	602
Own shares disposed of on exercise of share options	–	–	209	–	(194)	15
Capital contributions for share-based payments	–	–	–	627	–	627
Share-based payments	–	–	–	–	1,311	1,311
Balance as at 31 December 2023	**7,923**	**29,950**	**(546)**	**38,630**	**9,553**	**85,510**
Loss for the year	–	–	–	–	(5,474)	(5,474)
Total comprehensive income	–	–	–	–	**(5,474)**	**(5,474)**
Issue of ordinary shares	25	61	–	–	–	86
Own shares disposed of on exercise of share options	–	–	–	–	(18)	(18)
Capital contributions for share-based payments	–	–	–	751	–	751
Share-based payments	–	–	–	–	430	430
Balance as at 31 December 2024	**7,948**	**30,011**	**(546)**	**39,381**	**4,491**	**81,285**

Notes to the Company financial statements

C1. Presentation of the financial statements

Basis of preparation

The Company meets the definition of a qualifying entity under FRS 100 (Financial Reporting Standard 100) issued by the Financial Reporting Council. Accordingly, the financial statements have been prepared in accordance with FRS 101 'Reduced Disclosure Framework' and in accordance with the Companies Act 2006 as applicable to companies using FRS 101.

The financial statements have been prepared under the historical cost convention and on the going concern basis.

The financial statements are prepared in Sterling which is both the functional and presentational currency of the Company. All values are rounded to the nearest thousand pounds (£'000) except where otherwise indicated.

Disclosure exemptions adopted

As permitted by FRS 101, the Company has taken advantage of the disclosure exemptions available under that standard in relation to:

+ Business combinations;
+ Share-based payments;
+ Financial instruments;
+ Fair value measurement;
+ Presentation of a Statement of Cash Flows;
+ Key management and related party transactions, including those with subsidiaries;
+ impairment testing related disclosures; and
+ The effects of newly issued but not yet effective IFRSs.

The basis for the above exemptions is that equivalent disclosures are included in the consolidated financial statements which incorporate the financial position and performance of the Company.

C2. Principal accounting policies

The adopted principal accounting policies, which have been applied consistently with the year ended 31 December 2023, are the same as those set out in note 2 to the consolidated financial statements. Those noted below are in addition to those disclosed in the consolidated financial statements and are company specific.

Investments in subsidiaries

Investments in subsidiaries are stated at cost plus capital contributions arising from intercompany share-based payments arrangements and after provision for impairment, where required.

Where consideration for an investment in a subsidiary consists of the issue of shares qualifying for merger relief, the cost of investment is measured by reference to the nominal value of the shares issued, excluding any premium. The transactions subject to merger relief arose before the adoption of FRS 101. Grandfathering relief has been used, therefore, these legacy amounts were not modified on adoption of FRS 101.

Key area of estimation uncertainty: Impairment of investments

Investments are tested for impairment when there are indicators of potential impairment. The impairment review requires the value-in-use of each company to be estimated, these calculations are based on a number of assumptions. Areas of significant judgement include:

+ the estimation of future cash flows;
+ the selection of risk and the estimation of risk adjustment factors to be applied to cash flows;
+ the selection of an appropriate discount rate to calculate present value; and
+ the selection of an appropriate terminal growth rate.

The assumptions used in the impairment test are detailed in C6. The assumptions relating to future cash flows, estimated useful economic lives and discount rates are based on forecasts and are, therefore, inherently judgemental. Future events could result in the assumptions used needing to be revised, changing the outcome of the impairment test and resulting in impairment charges being recognised.

Share-based payments

The share-based payments reserve represents the cumulative charge recognised in relation to share option awards granted. Only the portion of the charge that relates to awards granted to employees of the Company is recognised in the Income Statement. The remainder of the costs (i.e. those related to employees of other entities in the Group) are recorded as an increase to the cost of investments in subsidiaries and are presented as a capital contribution.

Dividend income

Income is recognised when the Company's irrevocable right to receive the payment is established, it is probable that the economic benefits will flow to the Company and the amount can be measured reliably. This is generally when shareholders approve the dividend.

C3. Income statement

In accordance with the exemption permitted by Section 408 of the Companies Act 2006, the Company has elected to present neither a Company Income Statement nor a Company Statement of Comprehensive Income.

The Auditor's fee for the audit of the Company's financial statements was £39,000 (2023: £39,000).

C4. Employees and Directors

The average monthly number of employees including Executive Directors was:

	Year ended 31 December 2024 Number	Year ended 31 December 2023 Number
Research and development	**1**	1
Sales and marketing	**3**	3
Manufacturing and engineering	**2**	3
Administration	**20**	21
	26	28

Their aggregate remuneration comprised:

	Year ended 31 December 2024 £'000	Year ended 31 December 2023 £'000
Wages and salaries	**3,143**	3,629
Social security costs	**443**	441
Post retirement benefits	**145**	143
Share-based payments charge	**286**	1,257
Total staff costs	**4,017**	5,470

C4. Employees and Directors continued

Directors' Remuneration

The remuneration of the Directors, including rewards under share schemes and other contractual benefits, is included in the Directors' Remuneration Report on pages 57 to 68.

Share-based payments

The Company operates various share-based payments schemes; having adopted the disclosure exemptions available, full details of these schemes are included in Note 30 to the consolidated financial statements and are not duplicated here

The share-based payments expense recognised by the Company is calculated by reference to the number of options awarded to the employees of the Company, not those of the entire Group.

Post retirement benefits

The UK-based employees of the Company's UK companies have the option to be members of a defined contribution pension scheme managed by a third-party pension provider. For each employee who is a member of the scheme, the Company contributes a fixed percentage of each employee's salary to the scheme. The only obligation of the Company with respect to this scheme is to make the specified contributions.

The total cost charged to the Income Statement in respect of all of the Company's retirement benefit schemes during the year was £145,000 (2023: £143,000).

As at 31 December 2024 contributions of £36,000 (2023: £24,000) due in respect of the current reporting period had not been paid over to the scheme.

C5. Leases

Right-of-use assets

	Buildings £'000
Cost	
At 1 January 2023, 31 December 2023 and 31 December 2024	**1,166**
Depreciation	
At 1 January 2023	**224**
Charge in the year	**116**
At 31 December 2023	**340**
Charge in the year	**117**
At 31 December 2024	**457**
At 31 December 2023	**826**
At 31 December 2024	**709**

Lease liabilities

Lease liabilities are analysed as follows:	**31 December 2024 £'000**	31 December 2023 £'000
Current	**91**	89
Non-current	**510**	600
	601	689

The movement in lease liabilities is shown below:	**31 December 2024 £'000**	31 December 2023 £'000
At 1 January	**689**	802
Interest charge	**14**	15
Cash outflows	**(102)**	(128)
At 31 December	**601**	689

C5. Leases continued

Lease liabilities continued

Maturity analysis of lease liabilities:	31 December 2024 £'000	31 December 2023 £'000
Amounts falling due within		
Less than one year	**102**	102
Between one and five years	**538**	532
Later than five years	**–**	108
	640	742

Amounts recognised in the Income Statement:	31 December 2024 £'000	31 December 2023 £'000
Depreciation	**117**	116
Interest charge	**14**	15
	131	131

C6. Investments in subsidiaries

	31 December 2024 £'000	31 December 2023 £'000
At 1 January	**99,909**	99,282
Impairment	**(3,619)**	–
Capital contributions arising from share-based payments	**751**	627
At 31 December	**97,041**	99,909

Impairment

Impairment reviews are undertaken if events or changes in circumstances indicate that the carrying value may not be recoverable and a potential impairment may be required. Impairment reviews have been performed for XaarJet Limited, FFEI Limited, Pad Print Machinery of Vermont Inc and Xaar US Holdings Inc.

The remaining revenue streams of the FFEI Limited business are migrating to Xaar Jet Limited. This represents a significant change in the extent or manner in which an asset is used or is expected to be used, which therefore meets the indicator laid out in IAS 36. As the legal entity FFEI Limited will cease to trade during 2025, the investment was impaired to the recoverable net asset value, resulting in an impairment of £3,619,000.

The Directors believe that the carrying values of investments in the remaining subsidiaries (not identified above) are at least equal to their recoverable amounts. Therefore, no further impairments have been recognised in either the current or previous years.

The investment in XaarJet Limited was tested using discounted future cash flow forecasts to compute the value in use. A discount rate of 13.3% has been used. Revenue growth of 9.4% compounded annual growth rate (CaGR) to 2029 and a terminal growth rate of 2%, would result in a value in use equal to the investment value. Management forecasts expect to exceed this and are supported by a strong pipeline – refer to the strategic opportunities outlined in the Strategic update on pages 5-8.

Capital contributions arising from share-based payments

These amounts represent the fair value of equity-settled share options awarded to employees of subsidiary undertakings.

C6. Investments in subsidiaries continued

Subsidiaries

The subsidiary undertakings of the Company are listed below. All subsidiaries are directly owned by the Company except where indicated otherwise

Name	Country of incorporation	Address of registered office	Principal activity	Issued and fully paid up share capital	Proportion of ordinary share capital held by the Company
Xaar Technology Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Research and development	4,445,322 ordinary £1 shares	100%
XaarJet Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Manufacturing, research and development and sales and marketing	2 ordinary £1 shares	100%
XaarJet (Overseas) Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Sales and marketing	1 ordinary £1 share	100%
Xaar Trustee Limited 1	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Trustee	2 ordinary £1 shares	100%
Xaar Digital Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Treasury	100 ordinary £1 shares	100%
Xaar 3D Holdings Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Holding company	1,100 ordinary shares of £0.01 each	100%
Xaar US Holdings Inc.	USA	1000 Post and Paddock, Suite 405, Grand Prairie, Texas 75050, USA	Holding company	10,000 shares of common stock US$1 each	100%
Pad Print Machinery of Vermont Inc. 2	USA	201 Tennis Way, East Dorset, VT 05253, USA	Manufacturing, sales and marketing	200 shares of common stock US$1 each	100%
Xaar Americas Inc. 2	USA	1000 Post and Paddock, Suite 405, Grand Prairie, Texas 75050, USA	Sales and marketing	10,000 shares of common stock US$1 each	100%
Xaar Inkjet Technology (Shenzhen) Company Limited	China	Room 409, Floor 4, Building 13,Fuhai Industrial Zone, Fuzhou Avenue, Shenzhen, China	Sales and marketing	30 ordinary shares of £10,000 each	100%
FFEI Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Manufacturing, sales and marketing	100,000 ordinary £1 shares	100%
Megnajet Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Manufacturing, sales and marketing	1 ordinary £1 share	100%
Technomation Limited	England & Wales	Cambridge Research Park, Waterbeach, Cambridge, CB25 9PE	Research and development	100 ordinary £1 shares	100%

1. Xaar Trustee Limited shares are held by Xaar Technology Limited.
2. Xaar Americas Inc and Pad Print Machinery of Vermont Inc. shares are held by Xaar US Holdings Inc.

C7. Trade and other receivables

	31 December 2024 £'000	31 December 2023 £'000
Amounts owed by subsidiary undertakings	**8,570**	4,728
Prepayments	**228**	181
At 31 December	**8,798**	4,909

Amounts owed by subsidiary undertakings are unsecured, interest free and repayable on demand.

During the year ended 31 December 2024 the Company made no provision for doubtful debts relating to amounts owed by subsidiary undertakings (2023: £nil).

C8. Trade and other payables

	31 December 2024 £'000	31 December 2023 £'000
Amounts falling due within one year		
Amounts owed to subsidiary undertakings	**(22,845)**	(16,456)
Other payables and accruals	**(1,628)**	(1,411)
At 31 December	**(24,473)**	(17,867)

Amounts owed to subsidiary undertakings are unsecured, interest free and payable on demand.

C9. Deferred consideration

	31 December 2024 £'000	31 December 2023 £'000
Amounts falling due within one year		
Deferred consideration	**–**	(2,115)
	–	(2,115)

For full details of the deferred consideration balances and the transactions that gave rise to them, refer to Note 24 to the consolidated financial statements.

C10. Provisions

	31 December 2024 £'000	31 December 2023 £'000
Current		
Restructuring	**–**	(4)
	–	(4)

	31 December 2024 £'000	31 December 2023 £'000
Non-current		
Dilapidations	**(250)**	(250)
	(250)	(250)

The restructuring provision recognised in 2023 comprises of redundancy costs paid in 2024.

The Company operates from leasehold premises under a full repairing lease. The dilapidation provision recognised reflects the estimated costs of repairs that would be required to put these premises back into the state of repair required under the lease.

C11. Deferred tax

Unrecognised deferred tax assets

The Company has unrecognised deferred tax assets totalling £985,000 (2023: £1,308,000). These consist of the following.

Trading losses

Deferred tax assets are recognised for tax loss carry forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable.

As at 31 December 2024, the Company had unused UK trading losses of £1,984,000 (2023: £2,002,000) available to offset against future UK taxable profits of the same trade. These losses may be carried forward indefinitely. A deferred tax asset in respect of these losses is only recognised to the extent that there are offsetting deferred tax liabilities. Therefore, no deferred tax asset has been recognised (2023: £nil).

As at 31 December 2024, the Company has an unrecognised deferred tax asset in respect of carried forward UK trading losses of £496,000 (2023: £501,000).

Capital losses

As at 31 December 2024, the Company has unused capital losses of £1,131,000 (2023: £1,131,000) available for offset against future chargeable gains. No deferred tax asset has been recognised in respect of these capital losses as it is not considered probable that there will be future chargeable gains available. As a result, the Company has an unrecognised deferred tax asset in respect of carried forward UK capital losses of £283,000 (2023: £283,000).

These losses may be carried forward indefinitely

Other temporary differences

As at 31 December 2024, the Company has £206,000 (2023: £524,000) of unrecognised deferred tax assets relating to timing differences in respect of the recognition of the cost of share options granted and the future tax relief available on the exercise of these options.

C12. Share capital and reserves

Details of the Company's share capital, share premium and own shares reserves are included in note 27 to the consolidated financial statements.

Other reserves

Comprises the non-distributable portion of the dividend received by Xaar Plc from Xaar Digital Limited, the profit from the sale of a subsidiary and the capital contribution relating to share options granted to employees of subsidiaries.

C13. Dividends

No interim or final dividend was proposed or paid during either the current or preceding year. The Board of Directors are mindful of the importance of dividends to its shareholders and intends to resume the payment of dividends as soon as conditions allow.

C14. Related party transactions

Transactions with subsidiaries

The Company has taken advantage of the available exemption from disclosing related party transactions with other entities within the Group.

Transactions with Directors

Details of the remuneration of the Directors is set out in the Directors' Remuneration Report on pages 57 to 68.

Investor information
Five year record

	2024 Continuing operations £'000	2023 Continuing operations (restated) £'000	2022 Continuing operations (restated) £'000	2021 Continuing operations £'000	2020 Continuing operations £'000
Summarised consolidated results					
Results					
Revenue	**61,750**	70,241	72,782	59,254	47,984
Gross profit	**22,217**	26,891	28,644	20,190	13,010
Adjusted profit/(loss) before tax	**306**	2,884	2,716	(571)	(3,911)
Adjusted (loss)/profit after tax	**542**	2,820	3,605	(779)	(4,038)
Adjusted diluted (loss)/earnings per share	**0.7p**	3.5p	4.4p	(1.0)p	(5.2)p
Loss before tax	**(11,425)**	(2,717)	718	994	(4,322)
Basic (loss)/earnings per share	**(14.3)p**	(3.0)p	2.0p	0.9p	(5.7)p
Diluted (loss)/earnings per share	**(14.3)p**	(3.0)p	1.9p	0.9p	(5.7)p
Assets employed					
Cash and cash equivalents[1]	**8,711**	7,135	8,546	25,051	18,117

1 Cash and cash equivalents consist of cash at bank and in hand as well as treasury deposits.

Notice of the Annual General Meeting

Notice is hereby given that the twenty-eighth Annual General Meeting (AGM) of Xaar plc (the 'Company') will be held at Xaar plc, 1 Hurricane Close, Ermine Business Park, Huntingdon, Cambridgeshire, PE29 6XX on Wednesday 28 May 2025 at 9.30am for the following purposes:

Ordinary business

To consider and, if thought fit, pass the following Resolutions which will be proposed as Ordinary Resolutions:

1. THAT the Company's annual financial statements for the financial year ended 31 December 2024, together with the Directors' report and auditor's report on those financial statements, be received and adopted.

2. THAT PKF Littlejohn LLP be appointed as the Company's auditors to hold office from the conclusion of this meeting until the conclusion of the next general meeting of the Company at which financial statements are laid.

3. THAT the Directors be authorised to determine the remuneration of the auditors.

4. THAT Richard Amos be re-elected as Director of the Company.

5. THAT John Mills be re-elected as a Director of the Company.

6. THAT Andrew Herbert be re-elected as a Director of the Company.

7. THAT Inken Braunschmidt be re-elected as a Director of the Company

8. THAT Paul James be re-elected as a Director of the Company.

9. THAT Jacqueline Sutton be re-elected as a Director of the Company.

10. THAT Stuart Widdowson be re-elected as a Director of the Company.

To consider and, if thought fit, pass the following Resolutions which will be proposed in the case of Resolutions 11 and 12 as Ordinary Resolutions and in the case of Resolutions 13 and 14 as Special Resolutions:

11. THAT the Directors' Remuneration report for the year ended 31 December 2024 be approved.

12. THAT, in substitution for all existing authorities, pursuant to and in accordance with section 551 of the Companies Act 2006 ('Act') the Directors of the Company be hereby generally and unconditionally authorised to exercise all powers of the Company to allot shares in the Company, or grant rights to subscribe for, or convert any security into, shares in the Company ('Rights'):

i. up to an aggregate nominal value of £2,649,306.30 (being the nominal value of approximately one-third of the issued share capital of the Company); and

ii. up to an aggregate nominal value of £5,298,612.60 (being the nominal value of approximately two-thirds of the issued share capital of the Company) (such amount to be reduced by the nominal amount of any shares allotted or Rights granted under paragraph (i)) in connection with an offer by way of a rights issue (as defined in the Listing Rules issued by the Financial Conduct Authority pursuant to Part VI of the Financial Services and Markets Act 2000) or other pre-emptive offer to:

a. the holders of ordinary shares of 10 pence each in the capital of the Company ('ordinary shares') in proportion (as nearly as may be practicable) to the respective numbers of ordinary shares held by them;

b. holders of other equity securities, as required by the rights of those securities or, subject to such rights, as the Directors otherwise consider necessary.

and so that, in each case, the Directors of the Company may impose any limits or restrictions and make any arrangements which they consider necessary or appropriate to deal with treasury shares, fractional entitlements, record dates, legal, regulatory or practical problems in, or under the laws of, any territory or the requirements of any regulatory body or stock exchange or any other matter;

The authority granted by this Resolution will expire at the conclusion of the Company's next Annual General Meeting after the passing of this Resolution or, if earlier, at the close of business on the date 15 months after the passing of this Resolution, save that the Company may at any time before such expiry make any offer(s) or enter into any agreement(s) which would or might require shares to be allotted or Rights to be granted after such expiry and the Directors may allot shares or grant Rights in pursuance of any such offer(s) or agreement(s) as if the authority conferred hereby had not expired. This Resolution revokes and replaces all unexercised authorities previously granted to the Directors to allot shares or grant Rights but without prejudice to any allotment of shares or grant of Rights already made, offered or agreed to be made pursuant to such authorities.

13. THAT, subject to the passing of Resolution 12, the Directors of the Company be authorised to allot equity securities (as defined in section 560 of the Act) for cash under the authority conferred by that Resolution and/or to sell ordinary shares held by the Company as treasury shares as if section 561 of the Act did not apply to any such allotment or sale, provided that such authority shall be limited to:

a. the allotment of equity securities in connection with an offer of equity securities (but, in the case of the authority granted under paragraph (b) of Resolution 12, by way of a rights issue or other pre-emptive offer):

i. to the holders of ordinary shares in proportion (as nearly as may be practicable) to their respective holdings; and

ii. to holders of other equity securities as required by the rights of those securities or as the Directors otherwise consider necessary. But subject to such exclusions or other arrangements as the Directors may deem necessary or expedient in relation to treasury shares, fractional entitlements, record dates, legal or practical problems in or under the laws of any territory or the requirements of any regulatory body or stock exchange; and

Notice of the Annual General Meeting continued

b. the allotment of equity securities or sale of treasury shares (otherwise than pursuant to paragraph (a) of this Resolution) to any person up to an aggregate nominal amount of £794,791.80.

The authority granted by this Resolution will expire at the conclusion of the Company's next Annual General Meeting after the passing of this Resolution or, if earlier, at the close of business on the date 15 months after the passing of this Resolution, save that the Company may, before such expiry make offers or agreements which would or might require equity securities to be allotted (or treasury shares to be sold) after the authority expires and the Directors of the Company may allot equity securities (or sell treasury shares) in pursuance of any such offer or agreement as if the authority had not expired.

14. THAT the Company be generally and unconditionally authorised for the purposes of section 701 of the Act to make one or more market purchases (within the meaning of section 693(4) of the Act) of ordinary shares provided that:

a. the maximum aggregate number of ordinary shares authorised to be purchased is 7,947,919 (representing 10% of the issued ordinary share capital);

b. the minimum price (excluding expenses) which may be paid for an ordinary share is the par value of the shares;

c. the maximum price (excluding expenses) which may be paid for an ordinary share is an amount equal to the higher of (i) 105% of the average of the middle market quotations for an ordinary share as derived from the London Stock Exchange Daily Official List for the five business days immediately preceding the day on which that ordinary share is purchased, and (ii) the higher of the price of the last independent trade and the highest current independent bid on the trading venue where the purchase is carried out;

d. this authority shall expire at the conclusion of the next Annual General Meeting of the Company, or, if earlier, at the close of business on the date which is 15 months after the passing of this Resolution unless renewed, revoked or varied before that time; and

e. the Company may make a contract to purchase ordinary shares under this authority before the expiry of the authority which will or may be executed wholly or partly after the expiry of the authority, and may make a purchase of ordinary shares in pursuance of any such contract.

By order of the Board

Julia Crane
Company Secretary
24 March 2025

Notes

1. A member entitled to attend the meeting may appoint one or more proxies to exercise all or any of the member's rights, to speak at the meeting. A proxy need not be a member of the Company. If a member appoints more than one proxy, each proxy must be appointed to exercise the rights attached to a different share or shares held by the member. If a member wishes to appoint one or more proxies they may do so at www.signalshares.com. If not already registered you will need your Investor Code to do so, this can be found on your share certificate. If you need help with voting online, or require a paper proxy form, please contact our registrar, MUFG Corporate Markets by email at shareholderenquiries@cm.mpms.mufg.com, or you may call MUFG Corporate Markets on 0371 664 0391. Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate. MUFG Corporate Markets are open between 09:00 – 17:30, Monday to Friday excluding public holidays in England and Wales.

2. To be effective, the proxy vote must be submitted at www.signalshares.com so as to have been received by the Company's registrars not less than 48 hours (excluding weekends and public holidays) before the time appointed for the meeting or any adjournment of it. Any power of attorney or other authority under which the proxy is submitted must be returned to the Company's registrars, MUFG Corporate Markets, PXS 1, Central Square, 29 Wellington Street, Leeds LS1 4DL. If a paper form of proxy is requested from the registrar, it should be completed and returned to MUFG Corporate Markets, PXS 1, Central Square, 29 Wellington Street, Leeds LS1 4DL to be received not less than 48 hours before the time of the meeting (excluding weekends and public holidays).

3. Any person to whom this notice is sent who is a person nominated under section 146 of the Companies Act 2006 to enjoy information rights (a 'Nominated Person') may, under an agreement between him/her and the shareholder by whom he/she was nominated, have a right to be appointed (or to have someone else appointed) as a proxy for the Annual General Meeting. If a Nominated Person has no such proxy appointment right or does not wish to exercise it, he/she may, under any such agreement, have a right to give instructions to the shareholder as to the exercise of voting rights. The statement of the rights of shareholders in relation to the appointment of proxies in paragraphs 1 and 2 above does not apply to Nominated Persons. The rights described in these paragraphs can only be exercised by shareholders of the Company. A vote withheld is not a vote in law, which means that the vote will not be counted in the calculation of votes for or against the resolution. If you select the "Discretionary" option or if no voting indication is given, your proxy will vote or abstain from voting at their discretion. Your proxy will vote (or abstain from voting) as they think fit in relation to any other matter which is put before the meeting

4. In accordance with Regulation 41 of the Uncertified Securities Regulations 2001, the Company specifies that only those members entered on the register of members of the Company as at close of business on 23 May 2025 (or in the event the meeting is adjourned, on the register of members 48 hours before the time of any adjourned meeting) shall be entitled to vote at the meeting in respect of the number of shares registered in their name at that time. Changes to entries on the register of members after close of business on 23 May 2025 (or in the event the meeting is adjourned, on the register of members less than 48 hours before the time of any adjourned meeting) shall be disregarded in determining the rights of any person to vote at the meeting.

5. Copies of Directors' service agreements, the terms of appointment of Non-Executive Directors, and the register of Directors' interests kept by the Company under section 808 of the Companies Act 2006 will be available 15 minutes prior to the commencement of the meeting and will remain open and accessible during the continuance of the meeting to any person attending the meeting.
6. Biographical details of all Directors offering themselves for re-appointment are set out on page 35 of the Annual Report and Accounts.
7. Shareholders should note that it is possible that, pursuant to requests made by shareholders of the Company under section 527 of the Companies Act 2006, the Company may be required to publish on a website a statement setting out any matter relating to: (i) the audit of the Company's accounts (including the auditor's report and the conduct of the audit) that are to be laid before the Annual General Meeting; or (ii) any circumstance connected with an auditor of the Company ceasing to hold office since the previous meeting at which annual accounts and reports were laid in accordance with section 437 of the Companies Act 2006. The Company may not require the shareholders requesting any such website publication to pay its expenses in complying with sections 527 or 528 of the Companies Act 2006. Where the Company is required to place a statement on a website under section 527 of the Companies Act 2006, it must forward the statement to the Company's auditor not later than the time when it makes the statement available on the website. The business which may be dealt with at the Annual General Meeting includes any statement that the Company has been required under section 527 of the Companies Act 2006 to publish on a website.
8. A corporation that is a shareholder can appoint one or more corporate representatives who may exercise, on its behalf, all its powers as a shareholder provided that they do not do so in relation to the same shares.
9. CREST members who wish to appoint a proxy or proxies through the CREST electronic proxy appointment service may do so by using the procedures described in the CREST Manual. CREST Personal Members or other CREST sponsored members, and those CREST members who have appointed a service provider(s), should refer to their CREST sponsor or voting service provider(s), who will be able to take the appropriate action on their behalf.
10. In order for a proxy appointment or instruction made using the CREST service to be valid, the appropriate CREST message (a 'CREST Proxy Instruction') must be properly authenticated in accordance with Euroclear UK & International Ltd's ('Euroclear') specifications, and must contain the information required for such instruction, as described in the CREST Manual. The message, regardless of whether it constitutes the appointment of a proxy or is an amendment to the instruction given to a previously appointed proxy must, in order to be valid, be transmitted so as to be received by the issuer's agent (ID RA10) by 9:30am on 23 May 2025. For this purpose, the time of receipt will be taken to be the time (as determined by the timestamp applied to the message by the CREST Application Host) from which the issuer's agent is able to retrieve the message by enquiry to CREST in the manner prescribed by CREST. After this time any change of instructions to proxies appointed through CREST should be communicated to the appointee through other means.
11. CREST members and, where applicable, their CREST sponsors, or voting service providers should note that Euroclear does not make available special procedures in CREST for any particular message. Normal system timings and limitations will, therefore, apply in relation to the input of CREST Proxy Instructions. It is the responsibility of the CREST member concerned to take (or, if the CREST member is a CREST personal member, or sponsored member, or has appointed a voting service provider, to procure that his CREST sponsor or voting service provider(s) take(s)) such action as shall be necessary to ensure that a message is transmitted by means of the CREST system by any particular time. In this connection, CREST members and, where applicable, their CREST sponsors or voting system providers are referred, in particular, to those sections of the CREST Manual concerning practical limitations of the CREST system and timings.
12. The Company may treat as invalid a CREST Proxy Instruction in the circumstances set out in Regulation 35(5)(a) of the Uncertificated Securities Regulations 2001 (as amended).
13. As at 7am on 25 March 2025, the Company's issued share capital comprised 79,479,189 ordinary shares of 10 pence each. Each ordinary share carries the right to one vote at a general meeting of the Company, and, therefore, the total number of voting rights in the Company as at 7am on 26 March 2025 is 79,479,189. It is proposed that all votes on the Resolutions at the AGM will be taken by way of a poll. On a vote by poll, every ordinary shareholder has one vote for every ordinary share held.
14. Any member has the right to ask questions. The Company must answer any such question relating to the business being dealt with at the meeting but no such answer need be given if: (a) to do so would interfere unduly with the preparation for the meeting or involve the disclosure of confidential information; (b) the answer has already been given on a website in the form of an answer to a question; or (c) it is undesirable in the interests of the Company or the good order of the meeting that the question be answered.
15. You may vote your shares electronically at www.signalshares.com. On the home page, search 'Xaar plc' and then log in or register, using your Investor Code. To vote, click on the 'Vote Online Now' button.
16. A copy of this Notice, and other information required by section 311A of the Companies Act 2006, can be found at www.xaar.com.
17. Under section 338 of the Companies Act 2006, shareholders meeting the threshold requirements set out in that section, may, subject to conditions, require the Company to give to shareholders notice of a resolution which may properly be moved and is intended to be moved at that meeting.
18. Under section 338A of the Companies Act 2006, shareholders meeting the threshold requirements set out in that section may, subject to conditions, require the Company to include in the business to be dealt with at the meeting a matter (other than a proposed resolution) which may properly be included in the business.
19. Unless otherwise indicated on the Form of Proxy, CREST or any other electronic voting instruction, the proxy will vote as they think fit or, at their discretion, withhold from voting. Alternatively, you may vote via VOTE+. It is a free app for smartphone and tablet provided by MUFG Corporate Markets(the Company's registrar). It offers shareholders the option to submit a proxy appointment quickly and easily online, as well as real-time access to their shareholding records. The app is available to download on both the Apple App Store and Google Play, or by scanning the relevant QR code below.

Company information and advisors

Registered office
3950 Cambridge Research Park
Waterbeach
Cambridge CB25 9PE

Registered number
3320972

Company Secretary
Julia Crane

Brokers
Investec

30 Gresham Street
London, EC2V 7QP

Registered Auditor
PKF Littlejohn LLP

15 Westferry Circus
London E14 4HD

Solicitors
Mills & Reeve LLP

Botanic House 100 Hills Road
Cambridge CB2 1PH

Principal Bankers
HSBC Bank plc

63–64 St Andrews Street
Cambridge CB2 3BZ

Registrars
MUFG Corporate Markets

Central Square
29 Wellington Street
Leeds LS1 4DL

Unsolicited mail:

The Company is obliged by law to make its share register publicly available should a request be received. As a consequence, shareholders may receive unsolicited mail from organisations that use it as a mailing list. Shareholders wishing to limit the amount of such mail should either write to Mailing Preference Service, DMA House, 70 Margaret Street, London W1W 8SS, register online at www.mpsonline.org.uk or call the Mailing Preference Service (MPS) on +44 (0)845 703 4599. MPS is an independent organisation which offers a free service to the public.

Warning to shareholders – boiler room scams:

Each year in the UK, £1.2 billion is lost to investment fraud, with the average victim losing around £20,000. What is more, it is estimated that only 10% of the people that become victims of investment fraud actually report it.

Investment scams are becoming ever more sophisticated – designed to look like genuine investments, they are increasingly difficult to spot. They are targeted at those most at risk, typically people in retirement who are actively seeking an investment opportunity.

Protect yourself:

1. Reject cold calls

If you have been cold called with an offer to buy or sell shares, it is likely to be a high-risk investment or scam. You should treat the call with extreme caution. The safest thing to do is hang up. If you are offered unsolicited investment advice, discounted shares, a premium price for shares you own, or free company or research reports, you should get the name of the person and organisation contacting you and take these steps before handing over any money.

2. Check the firm on the Financial Services Register at www.fca.org.uk/register

The Financial Services Register is a public record of all the firms and individuals in the financial services industry that are regulated by the FCA. Use the details on the Financial Services Register to contact the firm.

3. Get impartial advice

Think about getting impartial financial advice before you hand over any money. Seek advice from someone unconnected to the firm that has approached you.

REMEMBER, if it sounds too good to be true, it probably is!

If you use an unauthorised firm to buy or sell shares or other investments, you will not have access to the Financial Ombudsman Service or Financial Services Compensation Scheme if things go wrong.

Report a scam

If you suspect you have been approached by fraudsters please tell the FCA using the share fraud reporting form at www.fca.org.uk/scams, where you can find out more about investment scams. You can also call the FCA Consumer Helpline on +44 (0)800 111 6768.

If you have lost money to investment fraud, you should report it to Action Fraud on +44 (0)300 123 2040 or online at www.actionfraud.police.uk.

→ **Find out more at www.fca.org.uk/scamsmart**

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