For Immediate Release **20 October 2022**

NANOCO GROUP PLC
("Nanoco", the "Group", or the "Company")

Unaudited Preliminary Results for the year ended 31 July 2022

"A critical year in which we delivered key value enhancing milestones"

Nanoco Group plc (LSE: NANO), a world leader in the development and manufacture of cadmium-free quantum dots and other specific nanomaterials emanating from its technology platform, is pleased to announce its unaudited Preliminary Results for the year ended 31 July 2022.

Operational Summary – long term commercial visibility being generated

- Significant contract extension with European electronics customer to deliver materials validated for commercial production in the short term
- Continuing development work with major Asian chemicals customer
- Increasing customer engagements for CFQD materials for display applications
- Consolidating all operations into Runcorn to deliver long term cash savings (net £0.7m p.a.)

Samsung Litigation – strengthened belief and confidence in our case

- Patent Trial and Appeal Board ('PTAB') confirmed validity of all 5 patents and 47 associated claims in the litigation against Samsung – firmly underpinning our unique leading edge IP
- Jury trial in Texas expected in the short term
- Filed additional lawsuit seeking injunction against Samsung in Germany
- Goal remains delivering fair value for global nature and remaining lives of our patents while acknowledging the remaining risks

Financial Summary – traded ahead of earlier expectations with enhanced and extended funding

- Revenue increased 19% to £2.5m (FY21: £2.1m) on increased activity levels
- Improved Adjusted LBITDA of £2.1m (FY21: £2.8m LBITDA) from revenue growth and savings
- Equity fundraising extended cash runway to CY 2025, beyond expected breakeven point
- Cash of £6.8 million at year end with average net monthly burn rate now under £0.2m

Brian Tenner, Nanoco's CEO, commented on the results:

"We have consistently delivered on all of our target milestones throughout the Period. The full year contract with the European electronics customer covers product validation and new material development. This is a clear sign of their commitment to commercialising infra-red sensors using Nanoco's quantum dots. We maintain our goal of being ready in H1 FY23 for potential commercial production orders in the short term.

"Interest has been re-energised in our CFQDs for use in displays. This reflects the gradually increasing number of panel makers seeking cadmium free solutions and also reflects the strong underpinning of Nanoco's IP provided by the PTAB decisions earlier this year.

"We are consolidating our core R&D and scale up capabilities in our Runcorn production facility to deliver sustainable net savings of around £0.7m p.a. The over-subscribed equity fund raise significantly extended the cash runway beyond when we expect to be self-financing. This has also allowed targeted strategic investments in new equipment and additional personnel as we increase our overall activity levels across the business, including new R&D staff to support new materials for other quantum applications.

"We are also pleased with the developments in our litigation against Samsung during the Period. The progress vindicates and enhances our confidence in the merits of our case. We won all five of the inter partes reviews at PTAB. At the pre-trial conference, the motions that are important to Nanoco were resolved in our favour. We have been able to narrow our focus ahead of the short one week trial onto

those claims that Nanoco considers to be the strongest and most clearly infringed. We patiently await a confirmed date for that trial.

"The whole Nanoco team has worked hard to deliver significant progress on a number of fronts during the year. We have increased the potential to create significant shareholder value in our organic activities and the Samsung litigation in the short to medium term. We will be working hard to continue these trends, particularly with confidence in the visibility of commercial production orders and an initial outcome to the trial in Texas during H1 FY23. The Board therefore has growing confidence in the strength of the investment proposition and value inherent in the business."

Analyst meeting and webcast details

A conference call and webcast for analysts will be held at 10:00am (UK time) this morning (20 October 2022):
Dial in: +44 (0)330 551 0200
Link: https://stream.brrmedia.co.uk/broadcast/62fe66248b876c6ccc6b69d2
For further details please contact MHP Communications on 0203 128 8990 or at nanoco@mhpc.com

A recording of the webcast will also be made available on Nanoco's website www.nanocotechnologies.com, later today.

There will be a further presentation via the Investor Meet Company platform on 21 October at 10:00am. Questions can be submitted in advance via the Investor Meet Company Dashboard before 9:00am on 21 October, or at any time during the live presentation. Investors can sign up to the Investor Meet Company platform for free and register their interest in events hosted by Nanoco Group Plc via:
https://www.investormeetcompany.com/nanoco-group-plc/register-investor

Investors who already follow Nanoco Group Plc on the Investor Meet Company platform will automatically be invited.

For further information, please contact:

Nanoco Group PLC:	
Brian Tenner, CEO	+44 (0) 161 603 7900
Liam Gray, CFO & Company Secretary	+44 (0) 161 603 7900
Peel Hunt (Joint Corporate Broker):	
Paul Gillam	+44 (0) 20 7418 8900
James Smith	
Turner Pope Investments (Joint Corporate Broker):	
Andrew Thacker	+44 (0) 20 3657 0050
James Pope	
MHP Communications:	+44 (0) 203 128 8570
Reg Hoare	
Pete Lambie	
nanoco@mhpc.com	

Notes for editors:

About Nanoco Group plc

Nanoco (LSE: NANO) harnesses the power of nano-materials. Nano-materials are materials with dimensions typically in the range 1 - 100 nm. Nano-materials have a range of useful properties, including optical and electronic. Quantum dots are a subclass of nano-material that have size-dependent optical and electronic properties. The Group produces quantum dots and other nano-materials. Within the sphere of quantum dots, the Group exploits different characteristics of the quantum dots to target different performance criteria that are attractive to specific markets or end-user applications such as the Display, Sensor and Electronics markets. An interesting property of quantum dots is their absorption spectrum. Nanoco's HEATWAVE™ quantum dots can be tuned to absorb light at different wavelengths across the near-infrared spectrum, rendering them useful for applications including image sensors. Another interesting property of quantum dots is photoluminescence: the emission of longer wavelength light upon excitation by light of a shorter wavelength. The colour of light emitted depends on the particle size. Nanoco's CFQD® quantum dots are free of cadmium and other toxic heavy metals, and can be tuned to emit light at different wavelengths across the visible and infrared spectrum, rendering them useful for a wide range of applications including displays, lighting and biological imaging.
Nanoco was founded in 2001 and is headquartered in Runcorn, UK, with a US subsidiary, Nanoco Inc., in Concord, MA. Nanoco continues to build out a world-class, patent-protected IP portfolio generated both by its own innovation engine, as well as through acquisition.
Nanoco is listed on the Main Market of the London Stock Exchange and trades under the ticker symbol NANO. For further information please visit: www.nanocotechnologies.com.

Chairman's statement

Steady delivery of critical, value enhancing milestones

Summary

- Major contract extension agreed with important European customer, underpinning scale-up and final production validation.
- Development agreement progressing with a major Asian chemical company that supplies global electronics markets.
- Continued expansion of our range of different materials, customer engagements, and applications for sensing materials.
- Growing expressions of interest in display materials following validation of Nanoco IP by PTAB and global RoHS developments.
- Confidence in the merits of our case against Samsung for the wilful infringement of the Group's IP in the USA further reinforced by PTAB decision to confirm validity of all our patents; currently awaiting a firm trial date.
- Operations transferred successfully from Manchester to Runcorn delivering net £0.7 million annualised savings from CY23.
- Over-subscribed equity issue of £5.4 million (net) secured cash runway to CY25 – beyond the point when the Group expects to be self-financing in its organic operations.

Strategy and business activity

This calendar year was always going to be a critical year for Nanoco. Our challenge was to deliver key value inflection milestones, in both the organic business and in the IP litigation against Samsung. By the end of the financial year we had successfully delivered in both areas.

The significant contract extension with our important European electronics customer underpins final product validation in the sensor market. It also provides new material research service income in advance of potential commercial production orders. We aim to have validated our materials and to have visibility of commercial production from the customer around the end of H1 FY23.

We have continued to build on our success in expanding our range of nanomaterials for use in sensing applications and to grow the number of active engagements with customers. This incremental approach to business development ensures that we balance the Company's financial resources against the need to continue to expand our product and customer reach.

Commercial success with materials in production will be the ultimate test for the success or failure of the business in the medium to long term. In the background, a small subset of the Nanoco team has driven the Samsung litigation forward enabling the commercial team to focus fully on the organic business.

Business performance

The organic business has enjoyed a number of notable successes during the year. A new one-year contract with our important European electronics customer creates a much more stable planning and operating environment for the Nanoco team. We expect to continue the expansion of our portfolio of materials and customers focused around infra-red sensing as we expand our IP in this area. We are also starting to see additional inbound enquiries for our display materials as markets take notice of our IP victories at PTAB.

The operations team completed a number of important change projects during the year, not least of which were the exits from the first and ground floors of our Manchester facility. We expect a number of operational benefits from having the whole team in one location as we look forward to visibility of our first commercial production orders around the end of H1 FY23. The operational benefits will be supplemented by just under £0.7 million of net annualised cash savings once the exits are complete towards the end of CY22.

The successful and significantly over-subscribed fundraise of £5.4 million (net) in June 2022 creates a solid foundation for the business by extending our cash runway out to CY25. This is expected to be beyond the resolution of any PTAB appeals and also potentially beyond the point when we expect the organic business to become self-financing.

No dividend is proposed for the year (2021: none).

Samsung litigation

It was extremely gratifying earlier in the year when the Patent Trial and Appeal Board ("PTAB") emphatically rejected all of Samsung's objections to the 47 claims in the five patents in the case. This is a clear vindication of the quality, strength and value of Nanoco's IP portfolio, which is now attracting new commercial interest from other market participants.

At the time of writing, we are still awaiting a firm date for the Jury trial in Texas. It is important to emphasise that Samsung is likely to appeal any verdict that favours Nanoco in this trial. As a result, we do not expect a conclusion of the US litigation until the appeals process is exhausted, which could take some years. Samsung has already lodged notices that it intends to appeal all of the PTAB findings, a process which is to be resolved over the next twelve to eighteen months.

So, even if we are successful at trial there will still be much work to be done before this matter is finally settled. Our resolve remains strong to achieve fair value in this matter for all of our stakeholders, whether through negotiated settlement or final enforced judicial outcome.

We have also recently taken steps to defend our IP in Germany, a major market for Samsung. Other venues for litigation are also being evaluated. The costs of the legal process in Germany are lower than the US, the speed of resolution is faster, and, importantly, injunctions preventing the sale of infringing units are more commonly granted. Our third party funding partner continues to support all aspects of these lawsuits, including the appeals processes.

Finally, the Board continues to review options for litigation against other potentially infringing entities, including third parties who may be purchasing infringing display units from Samsung.

Governance and Board

This has been another busy year for the Board, with active engagement from all members. Close monitoring of the IP litigation, as well the operational aspects of the business, has kept Board members busy. We have also pursued continuous improvement in our governance processes.

Non-Executive Director salary deferrals remained in place throughout the year as the Board continued to show leadership on cash and cost control. Following the improved outlook for the organic business and the successful fundraise in June 2022, it was decided to cease the 35% deferral of NED salaries with effect from 1 July 2022.

During the year, we benefited from the services of Henry Turcan as a Non-Executive Director, representing our largest shareholder, Lombard Odier Asset Management ("LOAM"). His contribution and perspectives on the capital markets in particular were immediately valuable. After the year end, with the business on a much more secure financial and commercial footing, Henry stepped down from the Board and LOAM has chosen not to nominate a replacement NED at this time.

Employees and shareholders

Our staff responded admirably to the welcome challenges of an increasing workload across all aspects of the business. We continue our efforts to provide staff with a supportive working environment and have made special provision during the relocation from Manchester to Runcorn. We are pleased that the vast majority of staff agreed to make the transition from Manchester to Runcorn. We have moved swiftly to ensure that the business is staffed appropriately in the run-up to potential commercial production orders in the near term.

Following a number of challenging years, we are pleased that we have been able to award a Company-wide pay rise for the first time since August 2019, whilst enhancing the overall Nanoco reward package to retain and motivate our high calibre team.

The Board is very grateful for the hard work of our staff, who have brought us to this exciting point in our evolution. Capturing the short-term opportunities we see in front of us will secure not just the Company's future but also the futures of our dedicated Nanoco team, whilst becoming a significant success story for the north west of England.

I would also like to thank our shareholders for their continuing support. The successful fundraise emphasises the strength of backing from existing and new shareholders. We hope to repay that support with significant growth in shareholder value in the short term that then endures for the long term.

I look forward to engaging with as many shareholders as possible at our AGM to be held on 20 December 2022.

Outlook

We continue to develop our product offering and to deliver technical milestones for our significant customers, as we move towards commercial production in the short term. This is a critical milestone in our aim to become a self-financing organic business with a broad range of diversified customers and products.

We expect that our confidence in the merits of our case against Samsung for infringement of our IP will be vindicated when the trial takes place in Texas in the near term. While undoubtedly there will be appeals and further delaying tactics deployed by Samsung, we will be able to manage those with full confidence and from a position of strength without ruling out our willingness to entertain a fair value early settlement proposal from Samsung.

Our focus remains to build a self-sustaining organic business as the best way to deliver enduring shareholder value. We will also work to protect and realise any value that is delivered by a trial verdict, and to ensure that it reflects not just the USA and the past, but the rest of the world and the future lives of our patents. Achieving both goals will deliver the Nanoco for which we have been striving for many years and a significant increase in value for all stakeholders.

Dr Christopher Richards

Chairman

20 October 2022

Chief Executive Officer’s statement

Strong delivery of commercial, technical, operational and litigation milestones

“Extending our cash runway beyond expected key litigation milestones and potential production order visibility in H1 FY23 was an important step. Both the organic business and the litigation create potentially transformative changes in shareholder value in the short to medium term.”

This year has been all about delivery. We have delivered or exceeded almost all of the targets we set at the start of the year. We outperformed our revenue target for the year while doubling the size of our opening order book for the coming FY23. We delivered all of the challenging technical milestones set by our customers for our high performing nanomaterials. We have almost completed the consolidation of our Manchester R&D and scale up activities into our Runcorn facility. This was accomplished despite a lower headcount that required us to call up all of our bench strength to ensure customer service was maintained while we made operational changes to the business. These changes will bring long-term operational benefits as well as welcome financial savings of around £0.7 million (net) per annum from January 2023.

Last, but not least, we have moved confidently through the various stages of the litigation against Samsung and cleared each of the hurdles in front of us. The trial in Texas is anticipated soon and we expect to build on all of the successful steps taken so far to deliver a favourable outcome. Our team of witnesses, experts and advisers remain ready for a trial at short notice.

Given Samsung’s appeals in the IPRs and the expected appeal of any verdict favourable to Nanoco, the litigation is still very likely to have a long way to go. With a favourable outcome to the trial, we will be able to approach the next steps from a position of strength. Further facts, background information and possible forward timelines can be found in the Annual Report and Accounts when it is published.

The year finished with a significantly over-subscribed equity issue and we took advantage of that appetite for investment by issuing the maximum 5% equity allowed under our AGM resolutions. Net proceeds of £5.4 million, combined with modest revenue growth in FY23 and a low volume use case for commercial production orders in H2 FY23, will fund the Group beyond the point at which we expect the organic business to be self-financing.

Business performance

Electronics

We continued our on-time delivery of all development milestones for our major European electronics customer. The new full year contract that runs until the end of April 2023 covers the scale up and final validation of two of our materials and also adds a third novel material set to our R&D efforts. While at a less advanced stage and at a smaller scale, promising progress continues to be made with our major Asian chemical company customer. That relationship has the potential to equal in scale the revenue generation we earn today from the European customer. Both the European and Asian customers participate in very large global markets wherein final customer adoption of QD sensing technology would lead to significant revenue for Nanoco. We also continued to seek out new customer relationships throughout the year with encouraging initial progress.

Success with sensing materials allowed us to turn an opening order book of just under £1.0 million into a full year revenue figure almost two and a half times higher at £2.5 million, alongside delivering a closing order book double the opening position. This larger closing order book gives a robust underpin to revenue expectations for FY23.

Our offering of nanomaterials for use in sensing applications has moved from a single customer/single product in early 2018 to a position today where we are engaged with seven customers and are working with twelve distinct materials/wavelength combinations. Additionally, a number of materials are progressing as they move from development towards final validation – the last step before commercial production orders are placed.

The mega-trends seen in electronics, automation, automotive and the Internet of Things more generally continue to be very favourable, supporting our strategy of adding our nanomaterials to silicon-based sensors to significantly enhance their performance and overcome a number of current challenges faced by those devices.

Given the scale of these sectors and the other market participants, we will typically be part of an extensive supply chain. This does mean that we are subject to events and decisions outside of our control – as happened with the US customer in 2019 – but it also means the potential is very high to deliver significant value if our materials make it into commercial production.

As previously announced, already published customer product launch plans suggest we should have good visibility of potential commercial production around the end of calendar year 2022, though, as always, the final decision to adopt the technology lies with the customers of our customer and this cannot be taken for granted. Our task is to ensure that our materials consistently perform as required by our customer so that we are scaled up and ready for those potential production orders.

Our small scale allows us to be much more agile and responsive to our customers' needs than many other players in electronics supply chains. The in-depth nature of our technological insight also means that we do tend to "punch above our weight" in terms of direct engagement even with very large end customers and their technology teams. Conversely, our small scale does present challenges for customers in terms of supply chain risks and we therefore work proactively to agree commercial solutions to the issue of supply chain security.

Display (CFQD® quantum dots)

Display remains an important target market for Nanoco. We have maintained our focus on our "dot only" strategy where we aim to provide the highest performing CFQD® quantum dots.

Activity and inbound enquiries about display materials have begun to grow again during the year. We believe this reflects a combination of our success with our patents at PTAB, the continued reduction in Samsung's market share in QD TV markets and associated entrance of new participants, and the increasing profile of Restriction of Hazardous Substances ("RoHS") and equivalent regulations around the world that limit the use of cadmium thus playing to our cadmium free offering. We have also seen increasing interest in the use of quantum dots in LEDs for both lighting and display applications.

We continue to seek out new relationships and a number of these are moving forward at a small scale, having delivered a number of small material samples to new customers during the year.

We are still awaiting the EU legislation to implement the final decision to end the RoHS cadmium exemption for film-based displays. This will provide fresh impetus to display panel manufacturers to embrace the benefits of our CFQD® quantum dots. We note that a number of OEMs are investigating environmentally friendly options rather than waiting for the EU legislation. European markets currently have sales of cadmium-based QD televisions and a move to cadmium-free solutions will provide a helpful tailwind.

We retain our core capabilities to deliver display R&D services, scale up and commercial production of material from our Runcorn facility. We are therefore well positioned to take advantage of any broadening in the adoption of non-toxic quantum dots by global display manufacturers when the opportunity arises.

A successful verdict in the litigation with Samsung will also positively affect our ability to derive income from our capabilities in display, whether in production, further robust defence of our existing IP portfolio, or the future licensing of our technology.

We will continue to adopt a dual approach to commercial exploitation of our display materials. We are still ready to license our technology to different channel partners but also retain our own manufacturing capability.

Life Sciences

In November 2020, the Life Sciences team secured a grant from Innovate UK, the UK's innovation agency, for a life sciences project to develop a quantum dot testing kit for the accurate and rapid visual detection of Covid-19. This project builds on Nanoco's existing capabilities in utilising quantum dots conjugated with antibodies as a diagnostic tool in the detection of cancer (VIVODOTS® nanoparticles). The project specifically focuses on antibodies for Covid-19.

However, as is the case with our other materials, our goal is to create a platform technology that is applicable to other pathogens and potential future variants of Covid-19. The project therefore remains relevant despite many other tests now being available on the market for Covid-19.

The project completed successfully and on time in May 2022 with a working prototype. We also had time to assess the test against other pathogens, clearly demonstrating the multiple use cases for our VIVODOTS®. We have now stood the team down following the move to Runcorn and our residual efforts relate to identifying potential exploitation avenues for the technology. Further progress and any value implications are likely to require the engagement of a partner organisation specialising in this field.

Operations

We completed the exit from the first floor of our Manchester facility early in the second half of FY22. We then took the decision to exit the ground floor and co-locate our entire suite of operations into our Runcorn facility. The display facility in Runcorn has been taken out of mothball and now hosts the R&D teams as well as our production capability for CFQD® quantum dots. The co-location will create a number of operational and team benefits while also reducing our annualised installed cost base by around £0.7 million (net) once decommissioning and dilapidations are complete in Manchester towards the end of CY22.

Our resulting team now numbers approximately 36 operational staff. We have delivered a striking reduction in our installed cash cost base from over £12.0 million in FY19 to around £4.0 million for FY23 while retaining our core capabilities. We have achieved this by focusing on our "dot only" strategy that plays to our core quantum dot expertise.

We continue to cross train our flexible production team to be able to operate both facilities to maximise our capability while minimising costs in the short term, allowing us to maintain our significant production revenue-generating capacity. In FY23, following a successful pilot in FY22, we plan on rolling out initial LEAN Six Sigma training ("LEAN") to every single member of staff whether in R&D, scale up or production. The behavioural and analytical benefits of LEAN will be a great boost for team performance.

Responding to Covid-19

We remain vigilant in the aftermath of the Covid-19 pandemic. We continue to emphasise good housekeeping practice such as hand hygiene and self-testing if symptoms occur followed by staying home if a test is positive. Many staff are able to work remotely if required to isolate and a number regular mix working from the labs and home with little impact on activity or effectiveness. We encourage staff to attend the office as much as possible as the working environment and relationships formed there are enhanced by this interaction.

Intellectual property

We continue to proactively manage our IP portfolio to maximise value and protect our core competencies. During the year, we focused the Group's IP portfolio on to a core of 503 (2021: 559) patents and patent applications with the most promising commercial potential. This net reduction reflected 24 new applications and 80 that were eliminated in territories or potential applications no longer felt worthwhile.

We continue to preserve trade secrets and have targeted our financial resources on strategic areas such as infra-red sensing where there is a strong overlap with our core IP. These are also areas with clear future commercial opportunities and benefits to be had from holding high quality patents.

Environment/Restriction of Hazardous Substances ("RoHS")

We reported last year that the European Commission ("EC") had received recommendations that:

- the exemption to allow cadmium (>100ppm) in QD films for display is no longer justified and should be phased out by 31 October 2021; and
- a new exemption is granted to allow cadmium-based quantum dots applied directly onto LED chips for displays and high CRI lighting for a period of five years.

Progress in implementing legislation to enforce this recommendation has been slow. It therefore seems likely that European consumers will continue to be exposed for some time to the known hazards of cadmium in televisions that exceed the limits shown above. Ahead of nations passing the required legislation, a number of display manufacturers appear to be anticipating the changes and Nanoco has received inbound enquiries in this field.

People

Our employees continue to provide great service to our customers in delivering high quality materials on time and achieving often stretching milestones and deliverables. It is welcome that the vast majority of staff have embraced the move to the Runcorn facility.

Retaining and incentivising our highly skilled team are key to delivering organic value from the business. We were therefore pleased to be able to propose a very reasonable pay award for the coming year. We also undertook a review of comparative salaries against national benchmarks (excluding London). Following that exercise, we were also able to offer structural pay rises for almost a third of our highly skilled workforce to remove everyone from the lower decile of comparator pay. Our goal for staff (excluding Executives) is to be a median payer with upside potential from our annual performance linked bonus scheme and Company-wide participation in the same Long Term Incentive Plan that the Directors enjoy.

Finally, reflecting staff feedback on their preferred benefits in addition to basic salaries, we have now increased the Company pension contributions to our medium-term target of 7.5%, an increase of 1.5%. We will review other benefits options and further potential improvements to pension contributions as our financial situation improves and when the Company becomes self-financing in its organic operations.

Outlook

We have created strong foundations for the Group to rebuild our value proposition. We expect visibility of commercial production orders for sensing materials around the end of H1 FY23. We also expect to complete our preparations for production readiness in H1 FY23. In parallel we continue to expand our material offering to other customers and other materials in sensing markets.

We have also seen growing interest in CFQD® quantum dots for use in the display industry and are engaging cautiously with market players other than Samsung which already participate in or are seeking to enter the QD TV market. This extends to interest in Gen 2 QD displays as well as displays utilising LEDs.

The recent fundraise has allowed us to plan or make a small number of tactical new hires in the business. These new hires range from income-generating customer facing roles, to scale up and production readiness roles, as well as front line and back office support staff. These will allow us to gradually grow our top line revenue and also position us for commercial production orders.

As ever, the main unknown is the actual timing and size of the initial use case for sensing materials. However, the significant investment by our customers in Nanoco materials and their own production and marketing efforts, emphasise that it is more likely to be a question of "when" and not "if". In any event, Nanoco has the flexibility, capability and capacity to meet small or large scale production orders in parallel with continued revenue generation from R&D services.

Most of our team is primarily focused on our organic business. However, a small group of staff is also focused on the Samsung litigation and realising value from our IP portfolio. It is likely that it will be some time before the financial benefits of any favourable verdict are enjoyed by Nanoco. However, we will continually seek to apply pressure to Samsung in various forms and jurisdictions with a view to settlement before the final exhaustion of every legal step. Our goal remains to deliver fair value that reflects the global nature and remaining lives of our patents while acknowledging there are risks for Nanoco in the continuing litigation, not least of which is the time value of money.

We continue to adopt a conservative stance with regards to future financial forecasts. We expect to achieve at least 20% revenue growth in FY23 based on a stronger opening order book, an increasing range of R&D services being offered to a broader base of customers, and an assumed low volume use case for commercial production orders commencing in H2 FY23. A larger or earlier use case for sensing materials would clearly improve the outlook. I remain confident that we can deliver value for all of our stakeholders in the short to medium term with the potential for additional transformative value in the Samsung litigation.

Brian Tenner

Chief Executive Officer

20 October 2022

Financial review

Creating a stable cost base from which to grow organically

Summary

- Revenue and other operating income increased by 24% to £2.8 million (2021: £2.3 million).
- Adjusted LBITDA has reduced to £2.1 million (2021: £2.8 million), reflecting the increase in revenue and operating income, and the continued focus on reducing the cost base.
- The consolidation of operations in Runcorn, and subsequent closure of the Manchester site, has further reduced our cash cost base.
- Cash remains a key focus – the fundraising completed in the year takes the cash runway out to CY25.

Revenue and other operating income increased by £0.5 million to £2.8 million (2021: £2.3 million). The increase is due to the ongoing contract with the European electronics customer and the grant for the development of a Covid-19 diagnostic testing kit, which was completed during the year.

Revenue from the sale of products and services rendered accounted for 96% (2021: 95%) of revenues with the balance being royalty and licence income. Revenue from services has increased from £1.3 million to £1.5 million due to the continued work with the European electronics customer. Revenue from the sale of development products was £0.8 million (2021: £0.7 million).

Billings have increased by £1.0 million to £2.7 million (2021: £1.7 million), which is in line with revenue.

Total operating expenses, excluding Share Based Payments (“SBP”) and associated costs, depreciation, amortisation and exceptional items, reduced in the year by £0.8 million to a total of £4.5 million (2021: £5.4 million). This reduction was primarily due to the fall in payroll costs to £2.6 million (2021: £3.3 million) and other cost savings identified.

During the prior year, our headcount was decreased from c.46 full time employees to c.39 employees. In the current year, this has fallen further to 36 employees. We have made these changes whilst retaining full operational and commercial viability.

In March 2022, we exited the first floor of our Manchester premises, and at year end, we were in the process of vacating the ground floor, with the lease set to expire in November 2022. The closure of the Manchester site, and consolidation into Runcorn, will save c. £0.7 million (net) per year.

During the year, we completed an over-subscribed fundraise, resulting in net proceeds of c. £5.4 million. This extended the Group’s cash runway to calendar year 2025, beyond the point when we expect the Group’s organic operations to be self-financing.

Highlights	2022 £ million	2021 £ million	% change
Revenue	**2.5**	2.1	18%
Other operating income	**0.4**	0.2	97%
Adjusted operating loss	**(4.2)**	(4.6)	(10%)
Adjusted LBITDA	**(2.1)**	(2.8)	(26%)
Net loss	**(4.7)**	(4.4)	(7%)
Loss per share (p)	**(1.52)**	(1.44)	6%
Billings	**2.7**	1.7	55%
Cash and cash equivalents	**6.8**	3.8	77%

Non-GAAP measures

The non-GAAP measures of adjusted operating loss and adjusted loss before interest, tax, amortisation and share-based payment charges ("LBITDA") are provided in order to give a clearer understanding of the underlying loss for the year that reflects cash outflow from the business. The calculation of both non-GAAP measures is shown in the table below:

	2022 £ million	2021 £ million
Operating loss	**(4.8)**	(5.0)
Share Based Payments	**0.6**	0.4
Employers NI on SBP	**0.3**	0.1
Depreciation	**0.5**	0.5
Amortisation[1]	**1.3**	1.2
Adjusted LBITDA	**(2.1)**	(2.8)

1 Includes impairment of intangible assets.

The loss before tax was £5.2 million (2021: £5.1 million), with the increase driven by non-cash SBP charges arising from the growth in the share price and a first full year of accrued interest on the loan notes issued in June 2021, offset by cost savings during the year.

Taxation

The tax credit for the year was £0.5 million (2021: £0.7 million). The tax credit to be claimed, in respect of R&D spend, is £0.5 million (2021: £0.7 million). Overseas corporation tax was £nil during the year (2021: £nil). There was no deferred tax credit or charge (2021: £nil).

In the financial year, the Company entered the patent box regime retrospectively, which should provide an advantageous tax rate of 10% on revenues or litigation proceeds arising from the Group's IP portfolio. At the year end, the Company had £40.5 million of accumulated losses to offset against any potential future profits.

Cash flow and balance sheet

During the year cash, cash equivalents, deposits and short-term investments increased to £6.8 million (2021: £3.8 million). The net cash outflow, excluding the benefits of the equity fundraise of £5.4 million in June 2022 (net of costs), was £2.4 million (2021: £4.4 million outflow). The decrease in cash outflows reflects increased revenue, a reduction in the cost base and some favourable movements in working capital compared to FY21, with a reduction in deferred revenue year on year. Tax credits of £0.7 million (2021: £0.9 million) were received during the year.

Expenditure incurred in registering patents totalled £0.1 million (2021: £0.4 million), reflecting the Group's continued focus on developing and registering intellectual property. Capitalised patent spend is amortised over ten years in line with the established Group accounting policy.

During the year, an impairment charge of £0.9m was posted against the net book value of the Group's IP. This reflects the continued rationalisation of the patent portfolio to ensure the remaining patents are commercially viable in the short to medium term.

Treasury activities and policies
The Group manages its cash deposits prudently. Cash deposits are regularly reviewed by the Board and cash forecasts are updated monthly to ensure that there is sufficient cash available for foreseeable requirements.

More details on the Group's treasury policies will be provided in the Annual Report and Accounts.

Credit risk
The Group only trades with recognised, creditworthy third parties. Receivable balances are monitored on an ongoing basis and any late payments are promptly investigated to ensure that the Group's exposure to bad debts is not significant.

Foreign exchange management
The Group invoices most of its revenues in US Dollars. The Group is therefore exposed to movements relative to Sterling. The Group will use forward currency contracts to fix the exchange rate on invoiced or confirmed foreign currency receipts should the amount become significant and more predictable.

There were no open forward contracts as at 31 July 2022 (2021: none). The Group's net profit and equity are exposed to movements in the value of Sterling relative to the US Dollar. The indicative impact of movements in the Sterling exchange rate on profits and equity based on the retranslation of the closing balance sheet will be summarised in note 27 to the Annual Report and Accounts, based on the year-end position.

Brexit
The Board continues to monitor the ongoing developments. Currently, the majority of the Group's revenues are for services delivered in the UK with minimal Brexit impact. Going forward, the Group expects a significant portion of its revenues from material sales to be from non-UK countries where the Government either already has or hopes to have in place equivalent trading arrangements as existed prior to Brexit.

Although there were some logistical challenges on trade with EU countries, this has largely been mitigated with little to no ongoing disruption.

Going concern
The equity fundraising in June 2022 raised £5.4 million net of costs. This extended the Group's cash runway to 2025. The Directors have a reasonable expectation that the Group has access to adequate resources to continue in operational existence for the foreseeable future.

Accordingly, they continue to adopt the going concern basis in preparing the consolidated financial statements and the Board concluded that it is appropriate to utilise the going concern assumption.

Covid-19 pandemic
The Group has completed detailed risk assessments and implemented the resulting action plans and Government guidance to create Covid-19 secure workplaces. We are able to meet customer needs while working in a safe fashion. We do not currently expect significant financial downsides though this is clearly dependent on changes in regulations and the scale of any further lockdowns, both in the UK and the wider world.

Macroeconomic factors
We continue to see inflationary pressures on raw materials. We attempt to mitigate these by reviewing suppliers and achieving volume breaks. In addition, with the ongoing cost of living crisis, we are cognisant of the impact on our staff, and have implemented a company-wide 6% inflationary wage increase from August 2022. We will continue to review market conditions and assess the impact on all stakeholders.

Summary
This year has been one of steady operational delivery and consolidation of our cost base. The closure of the Manchester site and relocation of operations to Runcorn, although producing some challenges, provides the Group with a central base from which to grow – one where R&D and production can operate in close proximity and improved collaboration.

Work has progressed very well with our customers, and we anticipate having visibility of commercial orders by the end of H1 FY23.

We are confident that the Group has a solid foundation from which to grow, to provide value to shareholders in the medium term.

Liam Gray
Chief Financial Officer
20 October 2022

Principal risks and uncertainties

In common with all businesses at Nanoco's stage of development, the Group is exposed to a range of risks, some of which are not wholly within our control or capable of complete mitigation or protection through insurance.

Specifically, a number of the Group's products and potential applications are at a research or development stage and hence it is not possible to be certain that a particular project or product will lead to a commercial application. Other products require further development work to confirm a commercially viable application.

Equally, a number of products are considered commercially viable but have yet to see demand for full scale production. It is also the case that the Group is often only one part of a long and complex supply chain for new product applications. The Group therefore has little visibility of demand other than from contracts already in place. There are therefore a range of risks that are associated with the different stages of product development as well as for the Group as a whole.

Principal overarching risk

The principal overarching strategic risk faced by the business is that the Group exhausts its available funding before achieving adequate levels of commercial revenues and cash flows to be self-funding.

This risk has been very significantly mitigated in the short term by the recent equity fund raise which has extended the Group's organic cash runway to CY25. This date is beyond a number of key litigation milestones which could trigger a significant inflow of funds to the Group.

More importantly, it is also beyond the point when the Group aims to be self-funding in its organic business activities, subject to final adoption of the technology by our customers and their end customers. The Board now considers that a plausible downside scenario no longer includes the risk or need for a major restructuring in the short term. Instead, the plausible downside scenario is based on delays in customer orders and a slower ramp-up in demand once those orders begin.

Additional continuing principal risk in FY22 and FY23, first identified in FY20

In February 2020, the Group initiated litigation against Samsung for wilful infringement of its IP. In May 2022 the Patent Trial and Appeal Board ("PTAB") confirmed the validity of all 47 of Nanoco's claims in the five patents relevant to the lawsuit. The Company expects a jury trial in Texas to be held in Q4 CY22 or shortly after.

Samsung has lodged notices to appeal against the decision of the PTAB and is likely to appeal against any trial verdict that favours Nanoco once the judge's final written decision is published. The Group therefore remains exposed to both positive and negative aspects of the litigation.

Successfully overcoming the appeals by Samsung will crystallise any contingent asset inherent in a favourable verdict, though the value of that contingent asset may change. Conversely, if Samsung is successful in its appeals, any contingent asset could become worthless.

Both outcomes will have significant implications for the value of the Group's IP portfolio, for potential licensing or royalty income, and for the prospects regarding the sale of CFQD® quantum dots. The implications could be significantly adverse or favourable depending on the eventual resolution of the lawsuit.

The Board consider that the balance of risk and reward has swung in Nanoco's favour but given the binary nature of a trial verdict and the likely appeals processes, it is, as yet, by no means certain that Nanoco will benefit from any contingent asset that arises from a potentially favourable verdict and damages award.

In either outcome (successful or unsuccessful), the Board will initiate a further review of the future strategy of the business.

Other principal risks
Other risks are those set out in the prior year's Annual Report and an update on their status will be included in the Annual Report for the year ended 31 July 2022.

Directors' responsibility statement

In accordance with the FCA's Disclosure and Transparency Rules, the Directors listed on the Company's website (www.nanocotechnologies.com/about-us/board-directors) confirm, to the best of their knowledge, that:

1. the unaudited Preliminary Results have been prepared in accordance with IFRS as adopted by the European Union and 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; and
2. the foregoing reviews and statements, include a fair review of the development and performance of the business and the position of the Group and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties faced by the Group.

By order of the Board

Brian Tenner
Chief Executive Officer
20 October 2022

Unaudited consolidated statement of comprehensive income

for the year ended 31 July 2022

	2022 £'000	2021 Restated1 £'000
Revenue	**2,467**	2,091
Cost of sales	**(420)**	(343)1
Gross profit	**2,047**	1,748
Other operating income	**361**	183
Operating expenses		
Research and development expenses	**(1,770)**	(2,150)
Administrative expenses	**(5,409)**	(4,790)1
Operating loss	**(4,771)**	(5,009)
- before share-based payments	**(4,152)**	(4,592)
- share-based payments	**(619)**	(417)
Finance income	**—**	—
Finance expense	**(450)**	(71)
Loss before taxation	**(5,221)**	(5,080)
Taxation	**524**	685
Loss after taxation	**(4,697)**	(4,395)
Other comprehensive income/(loss)		
Gain on exchange rate translations	**—**	—
Total comprehensive loss for the year	**(4,697)**	(4,395)
Loss per share		
Basic and diluted loss for the year	**(1.52)p**	(1.44)p

1 The comparative balances for Cost of Sales and Administrative expenses have been restated for the year ended 31 July 2021. Refer to note 2b of the accounting policies for more information.

The loss for the current and preceding year arises from the Group's continuing operations and is attributable to the equity holders of the Parent.

The basic and diluted loss per share are the same as the effect of share options is anti-dilutive.

Unaudited consolidated statement of changes in equity

for the year ended 31 July 2022

Group	Share capital £'000	Share premium £'000	Reverse acquisition reserve £'000	Share-based payment reserve £'000	Merger reserve £'000	Accumulated losses £'000	Total £'000
At 1 August 2020	30,570	117,292	(77,868)	3,901	(1,242)	(65,623)	7,030
Loss for the year	—	—	—	—	—	(4,395)	(4,395)
Other comprehensive income	—	—	—	—	—	—	—
Total comprehensive loss	—	—	—	—	—	(4,395)	(4,395)
Share-based payments	—	—	—	417	—	—	417
At 31 July 2021	30,570	117,292	(77,868)	4,318	(1,242)	(70,018)	3,052
Loss for the year	—	—	—	—	—	(4,697)	(4,697)
Other comprehensive income	—	—	—	—	—	—	—
Total comprehensive loss	—	—	—	—	—	(4,697)	(4,697)
Issue of share capital on placing	1,528	4,127	—	—	—	—	5,655
Costs of share placing	—	(274)	—	—	—	—	(274)
Issue of share capital on exercise of options	146	—	—	(167)	—	—	(21)
Share-based payments	—	—	—	619	—	—	619
At 31 July 2022	**32,244**	**121,145**	**(77,868)**	**4,770**	**(1,242)**	**(74,715)**	**4,334**

Unaudited Group and Company statements of financial position

at 31 July 2022

Registered no. 05067291

	31 July 2022 Group £'000	**31 July 2022 Company £'000**	31 July 2021 Group £'000	31 July 2021 Company £'000
Assets				
Non-current assets				
Tangible fixed assets	**98**	**—**	199	—
Right of use assets	**56**	**—**	340	—
Intangible assets	**1,616**	**—**	2,858	—
Investment in subsidiaries	**—**	**40,747**	—	40,128
	1,770	**40,747**	3,397	40,128
Current assets				
Inventories	**174**	**—**	110	—
Trade and other receivables	**1,518**	**29**	1,227	—
Income tax asset	**524**	**—**	686	—
Cash and cash equivalents	**6,762**	**5,497**	3,813	1
	8,978	**5,526**	5,836	1
Total assets	**10,748**	**46,273**	9,233	40,129
Liabilities				
Current liabilities				
Trade and other payables	**(1,510)**	**(638)**	(1,617)	(80)
Lease liabilities	**(153)**	**—**	(545)	—
Provisions	**(172)**	**—**	—	—
Deferred revenue	**(560)**	**—**	(253)	—
	(2,395)	**(638)**	(2,415)	(80)
Non-current liabilities				
Financial liabilities	**(3,919)**	**(3,392)**	(3,487)	(3,445)
Lease liabilities	**(16)**	**—**	(133)	—
Provisions	**(40)**	**—**	—	—
Deferred revenue	**(44)**	**—**	(146)	—
	(4,019)	**(3,392)**	(3,766)	(3,445)
Total liabilities	**(6,414)**	**(4,030)**	(6,181)	(3,525)
Net assets	**4,334**	**42,243**	3,052	36,604
Capital and reserves				
Share capital	**32,244**	**32,244**	30,570	30,570
Share premium	**121,145**	**121,145**	117,292	117,292
Reverse acquisition reserve	**(77,868)**	**—**	(77,868)	—
Share-based payment reserve	**4,770**	**4,770**	4,318	4,318
Merger reserve	**(1,242)**	**—**	(1,242)	—
Capital redemption reserve	**—**	**4,402**	—	4,402
Accumulated losses	**(74,715)**	**(120,318)**	(70,018)	(119,978)
Total equity	**4,334**	**42,243**	3,052	36,604

The Parent Company's result for the year ended 31 July 2022 was a loss of £340,000 (2021: loss of £6,516,000). There was no other comprehensive income in either the current or prior year.

The unaudited financial statements were approved by the Board of Directors on 20 October 2022 and signed on its behalf by:

Dr Christopher Richards
Chairman
20 October 2022

Brian Tenner
Director
20 October 2022

Unaudited Group and Company cash flow statements

for the year ended 31 July 2022

	31 July 2022 Group £'000	31 July 2022 Company £'000	31 July 2021 Group £'000	31 July 2021 Company £'000
Loss before tax	**(5,221)**	**(340)**	(5,080)	(6,516)
Adjustments for:				
Net finance expense	**450**	**396**	71	6
(Profit)/loss on exchange rate translations	**(211)**	**19**	17	2
Depreciation of tangible fixed assets	**105**	**—**	99	—
Depreciation of right of use assets	**366**	**—**	408	—
Amortisation of intangible assets	**498**	**—**	618	—
Impairment of intangible assets	**858**	**—**	623	—
Share-based payments	**619**	**—**	417	—
Gain on disposal of tangible fixed assets	**(36)**	**—**	(48)	—
Changes in working capital:				
(Increase)/decrease in inventories	**(62)**	**—**	30	—
(Increase) in trade and other receivables	**(141)**	**(58)**	(209)	—
Increase/(decrease) in trade and other payables	**(105)**	**98**	(757)	80
Decrease in provisions	**212**	**—**	—	—
Decrease/(Increase) in deferred revenue	**205**	**—**	(453)	—
Cash outflow from operating activities	**(2,463)**	**115**	(4,264)	(6,428)
Research and development tax credit received	**686**	**—**	908	—
Net cash outflow from operating activities	**(1,777)**	**115**	(3,356)	(6,428)
Cash flow from investing activities				
Purchases of tangible fixed assets	**(4)**	**—**	(35)	—
Purchases of intangible fixed assets	**(114)**	**—**	(357)	—
Proceeds from sale of tangible fixed assets	**36**	**—**	48	—
Interest received	**—**	**—**	—	—
Net cash outflow from investing activities	**(82)**	**—**	(344)	—
Cash flow from financing activities				
Proceeds from placing of ordinary share capital	**5,655**	**5,655**	—	—
Proceeds from issue of loan notes	**—**	**—**	3,150	3,150
Costs of financing/placing	**(274)**	**(274)**	(161)	(161)
Payment of lease liabilities (capital)	**(506)**	**—**	(642)	—
Payment of lease liabilities (interest)	**(83)**	**—**	(30)	—
Interest paid	**(3)**	**—**	(4)	—
Net cash inflow from financing activities	**4,789**	**5,381**	2,313	2,989
Increase/(decrease) in cash and cash equivalents	**2,930**	**5,496**	(1,387)	(3,439)
Cash and cash equivalents at the start of the year	**3,813**	**1**	5,170	3,440
Effects of exchange rate changes	**19**	**—**	30	—
Cash and cash equivalents at the end of the year	**6,762**	**5,497**	3,813	1

Notes to the financial statements

1. Reporting entity
Nanoco Group plc (the "Company"), a public company limited by shares, is on the premium list of the London Stock Exchange. The Company is incorporated and domiciled in England, UK. The registered number is 05067291 and the address of its registered office is Science Centre, The Heath Business and Technical Park, Runcorn, WA7 4QX. The Company is registered in England.

These Group unaudited preliminary results consolidate those of the Company and its subsidiaries (together referred to as the "Group" and individually as "Group entities") for the year ended 31 July 2022.

The information set out below has been extracted from the Group's draft report and accounts for the year ended 31 July 2022 and has not been audited. The Group expects to publish its audited annual report and accounts on 24 October 2022, which will be sent to Shareholders and available to view on the Company's website at www.nanocotechnologies.com. A further announcement will be made once published. No material amendments to the disclosures contained within this announcement are expected within the audited financial statements.

The unaudited preliminary results of Nanoco Group plc and its subsidiaries for the year ended 31 July 2022 were authorised for issue by the Board of Directors on 20 October 2022 and the unaudited statements of financial position were signed on the Board's behalf by Dr Christopher Richards and Brian Tenner.

The unaudited preliminary results do not constitute statutory financial statements within the meaning of section 435 of the Companies Act 2006. A copy of the statutory financial statements for the year ended 31 July 2021 has been delivered to the Registrar of Companies. There were no statements under section 498(2) or section 498(3) of the Companies Act 2006.

The statutory financial statements for the year ended 31 July 2022 will be delivered to the registrar of companies as soon as practicable.

The Company has elected to take the exemption under section 408 of the Companies Act 2006 not to present the Parent Company's income statement.

The significant accounting policies adopted by the Group are set out in note 3.

2. Basis of preparation

(a) Statement of compliance
The Group's and Parent Company's unaudited financial statements have been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and UK adopted IFRSs as issued by the International Accounting Standards Board for the year ended 31 July 2022.

(b) Basis of measurement
The Parent Company and Group unaudited financial statements have been prepared on the historical cost basis, except for the revaluation of financial assets classified as "fair value through other comprehensive income" or "fair value through profit or loss", which are reported in accordance with the accounting policies below.

In order to more fairly represent the cost of sales of the Group we have reclassified certain costs from administrative expenses to cost of sales for the comparative period. Total impact of the reclassification is an increase to cost of sales of £124,000 (2021: £134,000). There is no impact on reported loss or net assets of this reclassification.

(c) Going concern
All of the following matters are taken into account by the Directors in forming their assessment of going concern. The Group's business activities and market conditions, the principal risks and uncertainties, the Group's financial position and the Group's financial risk management objectives, policies and processes. The Group funds its day-to-day cash requirements from existing cash reserves.

For the purposes of their going concern assessment and the basis for the preparation of the financial statements, the Directors have reviewed the same trading and cash flow forecasts and sensitivity analyses that were used by the Group in the viability assessment, which cover the period to October 2024, a period of two years from the date of approval of the Annual Report and these financial statements. The same base case and downside (severe but plausible) sensitivities were also used.

The base case represents the Board's current expectations. Assumptions in the base case are:

- minimal sales of nanomaterials beyond current contracts - commercial services contracts are based on the existing pipeline of opportunities or agreements already in place;
- modest demand for commercial production materials in CY2023 with a subsequent slow ramp-up;
- a further extension to the services and supply contract with the European electronics customer;
- no revenue is assumed from other business lines though some small scale commercial deals are currently under discussion;
- consolidation of activities on one site in Runcorn to reduce costs with modest staff increases in key areas;
- small expansion of our self- funded research activities and continued maintenance costs to support our IP portfolio;

- loan notes are repaid as they fall due in June 2024 through either an equity fundraise or improved commercial opportunities;
- Board, plc and other costs reflect the current inflationary environment;
- the Group remains a going concern and hence eligible for R&D tax credits; and
- the installed cost base is capable of supporting significant increases in revenue above those assumed in the base case so there is no immediate requirement for short-term increases or new capital expenditure.

The downside case then flexes those assumptions as follows:

- a full year delay in small scale commercial production revenues (into CY24); and
- no new business from other customers once existing active engagements end.

The extreme downside case then flexes those assumptions further as follows:

- the engagement with the European electronics customer comes to an end without any commercial production;
- no revenues other than those already contracted; and
- the Group contracts to become an IP shell to protect the value in the Samsung lawsuit.

All three cases above produce cash flow statements that demonstrate that the Group has sufficient cash throughout the period of the forecast to October 2024, which is much longer than the twelve months requirement for a favourable going concern conclusion. Considering the current financial resources and monthly cash costs of the Group, with potential for further mitigating action as noted above, and after making appropriate enquiries, the Directors have a reasonable expectation that the Group has access to adequate resources to continue in operational existence for the foreseeable future.

Accordingly, they continue to adopt the going concern basis in preparing the consolidated financial statements. The financial statements do not reflect any adjustments that would be required to be made if they were prepared on a basis other than the going concern basis.

(d) Functional and presentational currency

These financial statements are presented in Pounds Sterling, which is the presentational currency of the Group and the functional currency of the Company. All financial information presented has been rounded to the nearest thousand.

(e) Use of estimates and judgements

The preparation of financial statements requires management to make estimates and judgements that affect the amounts reported for assets and liabilities as at the reporting date and the amounts reported for revenues and expenses during the year. The nature of estimation means that actual amounts could differ from those estimates. Estimates and judgements used in the preparation of the financial statements are continually reviewed and revised as necessary. While every effort is made to ensure that such estimates and judgements are reasonable, by their nature they are uncertain and, as such, changes in estimates and judgements may have a material impact on the financial statements.

In the process of applying the Group's accounting policies, management has made the following estimates and judgements, which have the most significant effect on the amounts recognised in the consolidated financial statements.

Estimates

Equity-settled share-based payments

The Group has historically issued LTIPs to incentivise employees. The determination of share-based payment costs requires: the selection of an appropriate valuation method; consideration as to the inputs necessary for the valuation model chosen; and judgement regarding when and if performance conditions will be met. Inputs required for this arise from judgements relating to the future volatility of the share price of Nanoco and comparable companies, the Company's expected dividend yields, risk-free interest rates and expected lives of the options. The Directors draw on a variety of sources to aid in the determination of the appropriate data to use in such calculations. The share-based payment expense is most sensitive to vesting assumptions and to the future volatility of the future share price factor.

Judgements

Impairment of investment and inter-company receivable

Judgement is required to assess the carrying value of the Company investment and inter-company receivable at each reporting date.

Accounting standards (IAS 36 Impairment of Assets) require investments in subsidiary undertakings (equity and loans) to be carried at the lower of cost or recoverable value. Recoverable value is defined as the higher of fair value less costs of disposal (effectively net sale proceeds) and value in use. Indicators of potential impairment noted in IAS 36 (paragraph 12) include, but are not limited to, situations where the carrying amount of the net assets of the entity is more than its market value and where significant changes with an adverse effect on the entity have taken place during the year.

The Directors consider the fair value of the Group to be market value (calculated as market capitalisation at year end) less costs to sell. Given the main trading entity is Nanoco Technologies Limited (owned by Nanoco Tech Limited), this holds the majority of the value. As the Group market value was in excess of the book value, no further impairment is proposed.

In line with IFRS 9, the Group and Company assesses on a forward-looking basis the expected credit losses ("ECLs") associated with its debt instruments carried at amortised cost. The Group applies the IFRS 9 simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

Revenue recognition

Judgement is required in reviewing the terms of development agreements to identify separate components of revenue, if any, that are consistent with the economic substance of the agreement and in turn the period over which development revenue should be recognised. Judgements are required to assess the stage of completion including, as appropriate, whether and when contractual milestones have been achieved. Management judgements are similarly required to determine whether services or rights under licence agreements have been delivered so as to enable licence revenue to be recognised. This matter is further complicated where a contract may have different elements which may result in separate recognition treatments under IFRS 15.

Impairment of intellectual property

As the Group has not made a profit to date, the carrying value of these assets may need to be impaired. Impairment exists where the carrying value of an asset exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its potential value in use. The value in use calculation uses market assumptions and the potential share the Nanoco technology could unlock. The Directors also use available information to assess whether the fair value less costs of disposal of the Group's non-current assets, including intellectual property, is less than their carrying amount. Furthermore, during the year another extensive review was undertaken to identify which patents are uncertain to be of value to Nanoco and should be allowed to lapse. As a consequence, patents with a value of £0.9 million (2021: £0.6 million) have been fully impaired in these financial statements. Judgements are based on the information available at each reporting date, which includes the progress with testing and certification and progress on, for example, establishment of commercial arrangements with third parties. The Group does not believe that any of its patents in isolation are material to the business. Management has adopted the prudent approach of amortising patent registration costs over a ten-year period, which is substantially shorter than the life of the patent. For external patents acquired the same rule is adopted unless the remaining life of the patent is shorter, in which event the cost of acquisition is amortised over the remaining life of the patent.

Research and development

Careful judgement by the Directors is applied when deciding whether the recognition requirements for development costs have been met. This is necessary as the economic success of any product development is uncertain until such time as technical viability has been proven and commercial supply agreements are likely to be achieved. Judgements are based on the information available at each reporting date which includes the progress with testing and certification and progress on, for example, establishment of commercial arrangements with third parties. In addition, all internal activities related to research and development of new products are continuously monitored by the Directors. Further information is included in note 3 of the financial statements.

3. Significant accounting policies

The accounting policies set out below are consistent with those of the previous financial year and are applied consistently by Group entities.

(a) Basis of consolidation

The unaudited Group financial statements consolidate the financial statements of Nanoco Group plc and the entities it controls (its subsidiaries) drawn up to 31 July each year.

Subsidiaries are all entities over which the Group has the power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee), exposure, or rights, to variable returns from its involvement with the investee and ability to use its power over the investee to affect its returns. All of Nanoco Group plc's subsidiaries are 100% owned. Subsidiaries are fully consolidated from the date control passes.

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the Group. The costs of an acquisition are measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the acquisition. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are initially measured at fair value at acquisition date irrespective of the extent of any minority interest. The difference between the cost of acquisition of shares in subsidiaries and the fair value of the identifiable net assets acquired is capitalised as goodwill and reviewed annually for impairment. Any deficiency in the cost of acquisition below the fair value of identifiable net assets acquired (i.e. discount on acquisition) is recognised directly in the consolidated statement of comprehensive income.

In the unaudited consolidated financial statements, the assets and liabilities of the foreign operations are translated into Sterling at the exchange rate prevailing at the reporting date. Income and cash flow statement items for Group entities with a functional currency other than Sterling are translated into Sterling at monthly average exchange rates, which approximate to the actual rates, for the relevant accounting periods. The exchange differences arising on translation are recognised in other comprehensive income. See note 3(b) of the financial statements.

All intra-group transactions, balances and unrealised gains on transactions between Group companies are eliminated on consolidation. Subsidiaries' accounting policies are amended where necessary to ensure consistency with the policies adopted by the Group.

(b) New accounting standards and interpretations

The following standards have been issued but have not been applied by the Group in these financial statements. These amendments to standards and interpretations had no significant impact on the financial statements:

- IFRS amendments effective from 1 January 2022 (UK adopted and EU endorsed)
- IAS 16 Amendment: Property, Plant and Equipment: Proceeds Before Intended Use

- IAS 37 Amendment: Onerous Contracts: Cost of Fulfilling a Contract
- IFRS 3 Amendment: Reference to the Conceptual Framework
- Annual Improvements Cycle 2018 to 2020 FRS 101 amendments effective from 1 January 2022:
- FRS 101 Amendment: 2020/21 Cycle – Disclosure Exemption from IAS 16

The following standards and amendments to standards have been issued but are not effective for the financial year beginning 1 August 2021 and have not been early adopted:

- IFRS standards effective from 1 January 2023 (EU endorsed and UK adopted)
- IFRS 17 Insurance Contracts and IFRS 17 Amendment: Amendments to IFRS 17 IFRS standards effective from 1 January 2023 (EU endorsed, not UK adopted)
- IAS 1 Amendment: Disclosure of Accounting Policies
- IAS 8 Amendment: Definition of Accounting Estimates
- IFRS standards effective from 1 January 2023 (not UK adopted, nor EU endorsed)
- IAS 1 Amendment: Classification of Liabilities as Current or Non-current
- IAS 12 Amendment: Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction
- IFRS 17 Amendment: Initial Application of IFRS 17 and IFRS 9 – Comparative Information FRS 101 amendments effective from 1 January 2023:
- FRS 101 Reduced Disclosure Framework: Prohibiting Insurers to Apply FRS 101 when IFRS 17 Becomes Effective

The amendments to standards and interpretations noted above are expected to have no significant impact on the financial statements.

4. Segmental information

Operating segments

At 31 July 2022 and 2021 the Group operated as one segment, being the research, development and manufacture of products and services based on high performance nanoparticles. This is the level at which operating results are reviewed by the chief operating decision maker (i.e. the Board) to make decisions about resources, and for which financial information is available. All revenues have been generated from continuing operations and are from external customers.

	31 July 2022 £'000	31 July 2021 £'000
Analysis of revenue		
Products sold	**782**	685
Rendering of services	**1,582**	1,303
Royalties and licences	**103**	103
	2,467	2,091

There was one material customer who generated revenue of £2,089,000 (2021: one material customer amounting to £1,590,000).

The Group operates in four main geographic areas, although all are managed in the UK. The Group's revenue per market based on the customer's location is as follows:

	31 July 2022 £'000	31 July 2021 £'000
Revenue		
Holland	**1,474**	1,031
Taiwan	**351**	291
France	**348**	372
Japan	**244**	80
USA	**27**	20
Canada	**19**	15
Singapore	**3**	-
UK	**1**	27
Saudi Arabia	**-**	255
	2,467	2,091

All of the Group's assets are held in the UK and all of its capital expenditure arises in the UK. The loss before taxation and attributable to the single segment was £5,221,000 (2021: £5,080,000).

5. Earnings per share

Group	**31 July 2022 £'000**	31 July 2021 £'000
Loss for the financial year attributable to equity shareholders	**(4,697)**	(4,395)
Share-based payments	**619**	417
Loss for the financial year before share-based payments	**(4,078)**	(3,978)

Weighted average number of shares

Ordinary shares in issue	**308,610,928**	305,699,102
Adjusted loss per share before share-based payments (pence)	**(1.32)**	(1.30)
Basic loss per share (pence)	**(1.52)**	(1.44)

Diluted loss per share has not been presented above as the effect of share options issued is anti-dilutive.

== Ends ==