NANOCO GROUP PLC

BROADENING THE SPECTRUM

Annual Report and Accounts 2018

NANOCO GROUP PLC

BUILDING OUT FROM OUR TECHNOLOGY PLATFORM

Strategic report

Corporate governance

Financial statements

Find out more about us online at www.nanocotechnologies.com

HIGHLIGHTS

The Group's nano-material platform technology supports opportunities across a wide range of markets and end-user applications. Recent performance in a number of these is summarised below:

Nano-materials (for use in the electronics industry)[1]

- Excellent progress in the execution of material development and supply agreements with undisclosed US Company
- £2.6 million received in milestone payments and fees from these contracts during the year
- Development of new manufacturing facilities in Runcorn, funded by £2.9 million advance payments by US Company against discounted future product sales
- Expansion project on track to complete by 31 December 2018
- Exploring further revenue-generating commercial service opportunities in advance of product sales

Display

- R&D activity changed focus during the year to improve dot performance in line with ever increasing technical requirements of the display industry
- Internal development and production resources pivoted away from Display to focus on the immediate nano-materials opportunity in the electronics market (noted above)
- Progress in Display continues to be hampered by the slow pace of market evolution
- Working with Wah Hong to provide film to a Taiwanese display panel maker targeting the gaming monitor niche. Revised customer launch date pushes back sales previously expected in the 2018 Christmas holiday season

Lighting

- Continue to explore a number of specialist applications in the UK and US, specifically targeting commercial vertical farms for vegetables and sports turf
- CareWear® (one of CareWear Corp.'s products) gaining early traction in the US

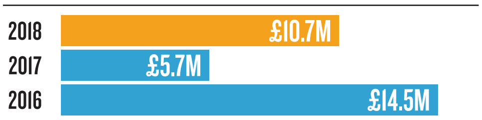
Life sciences

- Further progress in exploring potential uses of the Company's CFQD® technology for imaging and diagnosis of cancer
- Initial toxicology tests passed successfully

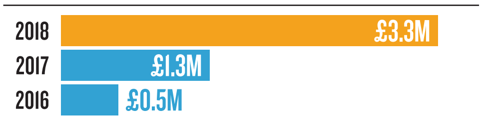
Financial highlights

- Significant increase in billings to £6.5 million (2017: £1.1 million)
- Revenue and other operating income more than doubled to £3.4 million (2017: £1.6 million)
- Loss after tax cut to £6.0 million (2017: £9.1 million) with £1.5 million full-year benefit of prior year cost reductions
- £7.9 million net proceeds from November 2017 fundraise
- Cash position increased to £10.7 million (31 January 2018: £8.7 million; 31 July 2017: £5.7 million), sufficient to fund Group assuming commercial production revenues early in H1 FY20. Cash includes an amount of £0.8 million received from a customer for the purchase of capital equipment. The cash cannot be used for any other purpose
- Contingency plans in place to reduce costs and preserve cash in event of further delays to commercial revenue streams

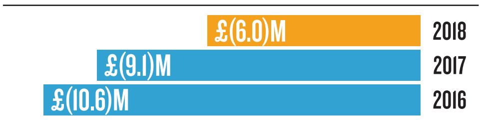
CASH



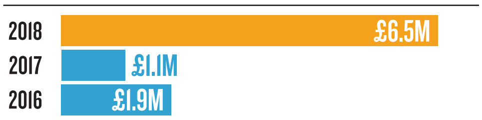
REVENUE



LOSS AFTER TAX



TOTAL BILLINGS*



1 The Group's platform technology is built on nano-materials. Nano-materials for use in the electronics industry are one subset of that platform. CFQD® quantum dots are another subset.

* "Total billings" is an alternative performance measure ("APM") not defined in GAAP. It represents the sum of invoices raised for revenue, other operating income and deferred revenue (see page 25 for reconciliation to the income statement). The Group uses APMs where they give the reader of the accounts additional insight into performance. They are not a substitute for, or superior to, GAAP performance measures.

Forward-looking statements

The disclosures in this Annual Report for Nanoco Group plc (the "Company") and its subsidiaries ("Nanoco" or the "Group") contain certain forward-looking statements. Although the Board believes that the expectations reflected in these forward-looking statements are reasonable, it can give no assurance that these expectations will arise. Because the expectations are subject to risks and uncertainties, actual results may vary significantly from those expressed or implied by the forward-looking statements based upon a number of factors. Such forward-looking statements include the statements under "outlook", prospects and the commercial success of our CFQD® applications and other existing or future revenue-generating sources, risks related to the Group's ability or that of its sub-contractors and partners to manufacture products on a large scale or at all, risks related to the Group's and its marketing partners' ability to market products on a large scale or expand market share in the face of changes in customer requirements, competition and regulatory and technological change, risks related to the ownership and use of intellectual property, and risks related to the Group's ability to manage growth. Nanoco undertakes no obligation to revise or update any forward-looking statement to reflect events or circumstances after the date of the Annual Report.

AT A GLANCE

LEADING THE FIELD

We are a world leader in the research and development of cadmium and heavy-metal-free quantum dots, called CFQD® quantum dots, and semiconductor nano-materials. We have the capability to manufacture CFQD® quantum dots in large scale and are creating a facility for the manufacture of semiconductor nano-materials.

WHAT WE DO

We are focused on continually developing and scaling up CFQD® quantum dots that are fit for purpose across large addressable markets. Our ability to innovate keeps us at the cutting edge of technology.

Nano-materials

New agreement with US Company in 2018

New production facilities funded by advance payments from US Company

R&D projects also ongoing

90% of revenues in 2018

Display

Multi-channel strategy

Own production of CFQD® quantum dots and resin

Direct sales through film producers (Wah Hong)

Dow and Merck technology licence

Lighting

Direct sales of own manufactured product

Specialised lighting focus

Horticulture

Phototherapy

Life sciences

Cancer imaging, diagnostics and therapy

Image-guided surgery

Excellent proof-of-principle data

Partnership with University College London and Cancer Research UK – grant funded

2D materials

Developing next generation nano-materials

In collaboration with Professor Konstantin Novoselov, 2010 Nobel Laureate for physics

Funded by £400,000 convertible loan from University of Manchester

Solar

Printable copper, indium, gallium and selenium ("CIGS") solar cell

Seeking licensing deals or possible divestment

WHY PARTNER WITH US?

Great depth of intellectual property and know-how in nano-materials

Platform technology allows access to multiple practical applications and markets

Deep intellectual property, with 650+ patents granted/pending

World-leading capability to develop production processes for nano-materials

Ability to scale up from R&D to production levels of manufacturing

In Display: the benefits of CFQD® quantum dot film

Better colour gamut
Reds are deeper, greens are brighter and the entire colour palette is rendered with unprecedented vividness, bringing the imaged world vibrantly to life.

Energy efficient
Nanoco's quantum dot technology is more efficient at converting energy to light.

Minimal process
Use of Nanoco's quantum dot technology enables the manufacturers to use their existing infrastructure.

Read about our markets on pages 12-13

WHERE WE DO IT

Nanoco is a global business with its headquarters in Manchester, where the Group's R&D activities are based. Our team totals around 90 people, most of whom are highly qualified scientists recruited from countries all around the world.

Business development
USA

Head office
Manchester, UK

Manufacturing
Runcorn, UK

Business development
Korea
Taiwan

REASONS TO INVEST

Our patented molecular seeding process allows for cost-effective production of uniform, high quality quantum dots and other nano-materials on a large scale.

Read about our business model on pages 10-11

1 Scalable "platform technology" with multiple markets and product applications.

2 Pioneer and world leader in the development and production of cadmium-free quantum dots (CFQD®s).

3 Hybrid IP licensing and material supply model with multiple routes to market.

4 Extensive patent portfolio, c. 650 patents granted/pending.

5 Developing multi-market and multi-application sales pipeline.

CHAIRMAN'S STATEMENT

SUBSTANTIAL PROGRESS

The Board is confident about the relevance of our technology and excited about the prospects for the Group in both the short and the long term.

Summary

- The last year has demonstrated the benefits of the technological leadership which the Group has developed.
- There are some potentially very attractive commercial opportunities emerging in the short term with a particular focus on the electronics market.
- Our challenge is to execute and deliver on those opportunities within the constraints of our current resource base.
- The Executive team is alert to the potential for any further delays in the realisation of those opportunities and contingency plans are in place to manage any further delays to our commercial development.

Introduction

This has been a year of substantial progress for Nanoco, most notably in relation to our agreements with a new customer in the electronics industry (the "US Company") to develop and produce advanced nano-materials. These new contracts, first announced in February 2018, represent a significant win against competition from major international companies. They demonstrate our capability in the design of nano-materials and our ability to scale up production to commercial volumes. Potential further agreements are in discussion which are expected to remove the material uncertainty that we face with respect to reducing our cost base if commercial revenues are further delayed.

At the same time, we continue to invest in cadmium-free quantum dots (CFQD® quantum dots) for other sectors. We have made progress towards commercialisation in the Display sector, while developing the applications of our technology in both the Life sciences and Lighting sectors. Meanwhile, our new investment in 2D nano-materials, in collaboration with the University of Manchester, will help to keep the Group at the forefront of developments in material science in this exciting area.

Business performance

Building on the global technological lead which Nanoco has developed over recent years, the nano-materials contract wins with the US Company are a recognition of both the Group's strong capabilities, and our highly skilled and adaptable professional staff. The Group has taken advantage of our strengths in technology and agility to respond quickly to new commercial opportunities as they have arisen and where the potential is significant. Our manufacturing capability at Runcorn and our laboratories in Manchester are being substantially improved in readiness to enter commercial production of specific nano-materials and to develop improved versions of them. Good progress is being made in building the new customer-funded production facilities at Runcorn.

> "WHILE THERE ARE STILL HURDLES TO OVERCOME AND A DEGREE OF UNCERTAINTY TO BE NAVIGATED, THE GROUP IS CURRENTLY ACTIVELY ENGAGED IN POTENTIALLY TRANSFORMATIVE TECHNOLOGICAL AND COMMERCIAL ACTIVITIES."
>
> **Dr Christopher Richards**
> Chairman

The performance of our CFQD® quantum dots will allow us to capitalise on commercial opportunities as they arise. The pressure on the electronics industry to remove toxic cadmium from the supply chain will add to the attractions of our products. This remains a critical investment for the Group. While movement of the commercial display market to quantum dots has been slower than anticipated, we are actively pursuing "early adopter" niches such as gaming monitors. We also continue to support our licensees in their efforts to access the large-scale TV display market.

Specialist lighting applications continue to make progress. We look forward to the full launch of CareWear® products in the coming financial year, while potential horticultural commercial sales are also currently being negotiated. Vertical farming is an area which is receiving very large investment and we believe our lighting technology is capable of delivering significant yield and quality benefits to growers.

In Life sciences, we have made important progress in demonstrating the safety-in-use of our materials. This will allow us to move forward towards the development of commercial applications in several therapeutic areas which we have identified as most relevant for our technology. The Board recognises that Life sciences requires different capabilities from our core electronic materials businesses and is exploring a number of strategic options, including a possible spin-out and/or partnership of this business line.

LIFE SCIENCES

CUTTING EDGE BATTLE AGAINST CANCER

Life sciences is now showing encouraging progress.

Pre-clinical safety studies performed on our biological quantum dots indicated no evidence of mutagenicity when evaluated by the widely used Ames test – an important initial safety test. Additional short and long-term safety studies and dose ranging on animals were initiated in GLP-compliant laboratories.

The studies will be concluded early next year but hitherto no apparent toxicity is observed. Once completed, the toxicology studies will become an important stepping stone towards regulatory approval for clinical development.

Application-wise, we continued our collaboration with UCL and other partners to generate feasibility data on breast and pancreatic cancer detection. In addition, a new method for enhancing cancer imaging and photodynamic therapy was invented by linking our biological dots to a specific type of targeting ligands. This new proprietary approach has the potential of providing unmatched precision in fluorescence-based detection and demarcation of several types of malignancies before and during surgery.

Following successful demonstration of performance in cell cultures, ongoing now are animal studies on skin and pancreas tumour models using support from Innovate UK grants. Once efficacy and safety are proven in animal models, this new technology can offer a dramatically improved cancer management with unparalleled efficiency, simplicity and low cost.

NO APPARENT TOXICITY OBSERVED TO DATE

CHAIRMAN'S STATEMENT CONTINUED

Business performance continued

In 2017 we set up Nanoco 2D Materials Limited to develop next generation 2D materials, in collaboration with the Nobel Laureate Professor Konstantin Novoselov. The project is jointly funded with the University of Manchester. This early-stage research has the potential to take the Group into new areas of nano-materials and keeps us at the leading edge of this sector.

Financial performance

Revenues and other operating income in the year to 31 July 2018 were £3.4 million (2017 £1.6 million) and the loss before tax was £7.4 million (2017: loss before tax of £10.9 million). Cash consumption during the year, excluding the benefit of the net £7.9 million equity raised in November 2017, was £3.0 million. With the Group still being at a pre-commercial production stage in its evolution, our financial focus remains firmly fixed on close management and control of our cost base and cash resources. Cash, cash equivalents and deposits at the year end were £10.7 million (31 July 2017: £5.7 million; 31 January 2018: £8.7 million). No dividend is proposed for the year (2017: none).

Governance and Board

The Board recognises the value of meeting the highest standards of corporate governance and will continue to strive to achieve such standards for the benefit of all stakeholders.

Following the resignation of Keith Wiggins, the Group's former COO, the Board concluded that an individual with a background in finance and a strong grounding in operational management would be the right match for the CEO and CTO. The Board decided therefore to create a new combined role of Chief Operating Officer and Chief Financial Officer to be based in the UK.

Brian Tenner was appointed to this new combined role, effective from 20 August 2018, with previous CFO, David Blain, standing down from his position on the Board as a result of this reorganisation. David remained involved in the business until 15 October 2018 in order to effect an orderly handover of the CFO duties.

Brian brings significant experience of performing operational finance roles in a number of diverse industries. He also brings broad experience of leading publicly listed businesses through transformation and change at critical points in a business lifecycle. I welcome Brian to the Board and would like to thank Keith and David for their contributions to the Group during their tenure.

Employees and shareholders

On behalf of the Board, I would like to pay tribute to Nanoco's employees for their achievements during the year. This has been an exceptionally busy year, even by our own standards. The Group's exceptional, multi-national team has responded with remarkable professionalism, flexibility and dedication. The Board is enormously appreciative of their contributions and commitment to the Group.

I would also like to thank our shareholders for their continuing support and look forward to meeting as many as possible at our AGM to be held on 13 December 2018.

Outlook

The last year has demonstrated the benefits of the technological leadership which the Group has developed. There are some potentially very attractive commercial opportunities emerging in the short term with a particular focus on the electronics market. Our challenge is to execute and deliver on those opportunities within the constraints of our current resource base. The Executive team is alert to the potential for any further delays in the realisation of those opportunities and contingency plans are in place to manage any further delays to our commercial development.

While there are still hurdles to overcome and a degree of uncertainty to be navigated, the Group is currently actively engaged in potentially transformative technological and commercial activities. The Board is therefore confident about the relevance of our technology and excited about the prospects for the Group in both the short and the long term.

Dr Christopher Richards
Chairman
16 October 2018

CHIEF EXECUTIVE OFFICER'S STATEMENT

NEW OPPORTUNITIES IN THE ELECTRONICS INDUSTRIES

By managing the uncertainty and challenges around our current short-term commercial opportunities we can deliver a transformative change in the Group's evolution that will create a robust foundation for our longer-term future.

Summary

- It has been a challenging year for the Group due to changes in programme launches by both our existing and potential new customers which have had an adverse impact on revenue expectations.
- In response to these delays we continue to maintain close control of our cost base and our cash resources.
- On the upside, the rapid progress in developing our nano-materials into a viable product for use in a highly demanding electronics environment is a testament to the unique capabilities of the Group, the flexibility of each member of our staff and the agility of the organisation as a whole.
- Our current pipeline of opportunities is expected to support revenues in 2019 that are around double those achieved in 2018.

Overview

This has been an exciting but challenging year for the Group. We have seen significant new opportunities open up in the electronics industry. These opportunities are a recognition of our world-leading capability to design and produce commercial volumes of nano-materials. We have committed significant resources to further enhance the capabilities of our team which has enabled the Group to improve the materials offered. We have formed a close working relationship with a US Company which has demonstrated its commitment and belief in Nanoco with a number of valuable collaborative contracts.

The challenges have included setbacks in Display, where our progress in getting a commercial product to market has suffered further delays, and the commercial supply of nano-materials to the US Company, which has been pushed back to the second half of calendar year 2019.

Overview continued

This impacts our revenue expectations for the coming year which are now lower than they would otherwise have been.

The Group raised £8 million of additional equity funding in November 2017 to support our further development. We are maintaining close control of our cost base to take advantage of the restructuring carried out in the prior year. Our goal is to manage the business within our existing resources until we are generating meaningful cash flows from one or more of our key market sectors. Our medium-term goal is to achieve a self-sustaining level of annual cash flows.

Nano-materials for the electronics industry

Building on our world-leading understanding of nano-materials and our capability to scale up commercial production, we identified a potentially valuable opportunity in the electronics market. The US Company has brought a number of well-funded contracts to the Group during the year. These projects have focused on scaling up and manufacturing specific nano-materials. In order to be ready for the commercial production of these new materials, we have designed, built and are in the process of fitting out a new manufacturing facility at the Group's Runcorn site. The new nano-material manufacturing facility is on schedule to be completed by 31 December 2018.

We will then continue to push the performance capabilities of our materials and expect to begin delivery of commercial production volumes of material in the second half of the 2019 calendar year. We are part of an extensive supply chain in the electronics market and, as we announced during the past year, our own future performance and activities are subject to changes outside our control. We are therefore continuing to carefully manage and match our resources to value adding activities. While our work is currently focused on one large commercial opportunity, our materials have clear benefits in a wide range of applications and markets, within the electronics sector but also in broader industrial sectors. The Group is also actively exploring further commercial research and development opportunities to exploit in the period leading up to full-scale production.

Display

We recognise that our Display business continues to take longer than originally anticipated to deliver meaningful commercial revenues. The technical demands of the display industry have also continued to increase and so we have allocated more of our R&D resources to improving the performance of our CFQD® quantum dots in order to keep pace with these demands.

Two years ago we modified our strategy from a pure licensing model to a hybrid business model; we have licensed our technology to three different channel partners while also developing our own manufacturing capability. We have continued to work with our licence partners Dow, Merck and Wah Hong as our R&D efforts lead to enhanced product performance, in order to support their efforts to reach commercial sales agreements with their own potential customers. We also continue to receive modest minimum licence fees and royalty payments from our partners.

Our own direct sales efforts are targeted on specific OEMs within the display sector. In the near term we have focused on gaming monitors as a first step on the technology pathway to broader adoption of quantum dots in television mass markets. It remains the case that the Group is part of a relatively long supply chain and any delays in that chain which impact product launch dates can have a considerable knock-on effect on when commercial revenues can be achieved by Nanoco.

As noted above, the broad base of our nano-material platform technology (of which CFQD® quantum dots are a subset) has allowed us to pivot a significant proportion of our development and manufacturing resource away from Display to take advantage of the electronics industry opportunity with the US Company. This nano-materials opportunity is both more near term and potentially more commercially significant over the next two financial years than any of the current display opportunities which continue to be held back by the slow pace of market development. It is the strength in depth and skills developed in our Display business over recent years that has allowed us to take advantage of this alternative nano-materials opportunity. Meanwhile, we will continue to invest in CFQD® quantum dots R&D and to explore the short to medium-term commercial opportunities that the display industry offers.

Specialist lighting

The properties of properly tuned light in accelerating both plant growth and the quality and freshness of vegetables in particular is well documented. The Group's CFQD® quantum dots have been found to be particularly effective in improving crop yields in both quantity and quality. The Group is working closely with potential lighting manufacturing and installation companies which are targeting indoor (vertical) farms. The vertical farming sector is currently attracting substantial investment and is set to grow rapidly over the coming years. The Group's CFQD® quantum dots are well placed to support this activity and a number of near-term commercial opportunities are being worked on.

Nanoco is working with CareWear® Corp., a developer and manufacturer of patented wearable therapeutics that emit specific wavelengths of light to help professional athletes and patients recover from injuries faster. CareWear's FDA registered light therapy delivery system features the first fully flexible, wearable, ultra-slim light patches that integrate Nanoco's CFQD® quantum dot films, along with a proprietary printed LED substrate, and a hydrogel interface to adhere the patches to the skin.

CareWear's light patches deliver PhotoBioModulation ("PBM") therapy using a combination of blue and red light to relax muscles, improve circulation and treat inflammation, which reduces pain and promotes tissue healing following injury.

Recent university research has shown that CareWear's wearable therapeutics have a significant effect on recovery from exercise. Professional sports teams are beginning adoption of CareWear's light patches as part of the initial deployment strategy into the sports markets. CareWear® is currently shipping product in commercial quantities and anticipates its wearable light patches to become a standard of care for the immediate treatment of soft tissue injuries and reduction of recovery time following intense activity. We expect demand to grow now that the product is commercially available.

Life sciences and Solar

Nanoco Life sciences continued to make meaningful pre-clinical progress in the development of our cancer imaging and diagnostic agents. The materials have passed initial toxicology tests; further tests are due to complete during the first half of calendar 2019. We believe that significant commercial progress for our Life sciences business line will depend on attracting the right strategic development partner. The Group is taking the initial steps to identify such a partner.

Separately, the Group continues to pursue the licence of its Solar assets.

Production capability – Runcorn

We have made a major investment in our Runcorn production facility during the year. The majority of the Group's capital expenditure in the year related to the expansion at Runcorn for production of nano-materials for the US Company mentioned above.

The cost incurred during the year was £2.0 million and the estimated total cost of expanding the facility is approximately £4.0 million. Funding for the expansion project was provided as part of one of the collaboration agreements with the US Company. The end result will be a doubling of the production footprint at Runcorn and the new facility will have new production equipment more than capable of meeting the demanding specifications for our nano-materials in an electronics supply chain.

Environment/Restriction of Hazardous Substances ("RoHS")

Nanoco is committed to protecting the environment in which our activities are conducted. This commitment is directly expressed in our decision to develop our CFQD® quantum dot products to be free of toxic cadmium, which is still widely used by our competitors in their quantum dot products.

Nanoco has participated actively with regulators on the use of cadmium-based quantum dots in displays and LED light products. The European Commission ("EC") revised the RoHS exemption last year so that it immediately ceased for lighting and will end on 31 October 2019 for display products, after which the normal RoHS limit for cadmium of 100ppm will apply. Nanoco expects that regulations in other key markets, including China, will fall in line with RoHS in future. Meanwhile, our contacts with display companies indicate that most already accept the need for new display products to be cadmium free – especially the world-leading brands in television, computer monitor and laptop displays. The current legal exemption from the cadmium-free requirements of RoHS was subject to a final review by the EC as in April 2018 one European lighting company and one Chinese QD company requested a further extension.

The EC has also started a project to review the list of toxic substances that are restricted under RoHS regulations and to review how to evaluate exemption requests. Indium phosphide ("InP") is included in materials to be considered for future inclusion in the RoHS restricted materials list because it is rated as a probable carcinogen. However, it is far less harmful and does not persist in the environment as cadmium does. It is important to note that Nanoco does not use InP in its CFQD® quantum dots, which have been tested and shown to be non-toxic for potential medical use in cancer imaging and diagnostics. The EC has also included in this package of work one new request for cadmium-based QDs to be used in "on-chip" LED lighting applications. Nanoco is actively participating in the review process for the proposed RoHS changes and continues to champion the use of safer alternatives to cadmium-based QD.

People

Our employees are our strongest asset. It is their technical skill and ingenuity which allow the Company to continue to aggressively innovate and remain at the leading edge of our industry. We therefore remain committed to ensuring that they have access to the appropriate resources to keep their skills and experience up to date. The additional focus this year on our nano-material opportunity was an example of where we were able to leverage our scientifically broad-based skill set and technical know-how.

Outlook

It has been a challenging year for the Group due to changes in programme launches by both our existing and potential new customers which have had an adverse impact on revenue expectations. In response to these delays we continue to maintain close control of our cost base and our cash resources. We remain alert to the uncertainty around our short-term revenue and cash flow expectations. We have developed contingency plans that will give the Group time to deal with any further potential delays in realising new commercial revenue-generating opportunities.

On the upside, the rapid progress in developing our nano-materials into a viable product for use in a highly demanding electronics environment is a testament to the unique capabilities of the Group, the flexibility of each member of our staff and the agility of the organisation as a whole. While currently focusing on one specific and, for Nanoco, significant commercial opportunity, we continue to explore other avenues to sell our expertise and high performing nano-materials. These near-term electronics opportunities will necessarily divert some production resources away from our Display business where our short-term focus will be on R&D improvements to the performance of our dots so that medium-term commercial opportunities can be exploited as they emerge.

We are also negotiating a number of new commercial revenue opportunities for our services in advance of material production revenues and will inform the market as they are won. Our current pipeline of opportunities is expected to support revenues in 2019 that are around double those achieved in 2018. We remain positive about the opportunity ahead of us. The Group has sufficient funding assuming commercial production revenues begin early in the first half of FY20. By managing the uncertainty and challenges around our current short-term commercial opportunities we can deliver a transformative change in the Group's evolution that will create a robust foundation for our longer-term future.

Dr Michael Edelman
Chief Executive Officer
16 October 2018

OUR BUSINESS MODEL

DEVELOPING LEADING EDGE TECHNOLOGY

Nanoco has a successful track record of innovation and is regarded as a world leader in the field of nano-materials. We have focused our short-term efforts on the electronics industry, while maintaining ongoing work in the display sector.

Our key resources and relationships

Our employees
Our people are one of our key differentiators. They enable us to develop leading edge R&D and create improvements in manufacturing processes by utilising their combined skills, knowledge and expertise. This in turn leads to superior products for our customers.

"Platform" technology
Rather than being specific to an individual application, market sector or customer, our unique technology represents a platform that spans multiple end-user markets and potential applications. This creates an extremely valuable broad scope of possible commercial opportunities.

IP
IP and technology is the foundation of the Group and a key asset. Our technology is heavily patented to secure its use for the Group. New IP and technology is continually generated for future use by the Group.

Partner licensees and customers
Non-exclusive licences with Dow, Merck and Wah Hong give the Group multiple routes to access the display market. This creates the possibility of scale leverage without the need for major investment by Nanoco. Revenues with the US Company represented 91% of total revenues in year ended 31 July 2018.

How we generate revenue

Operations
Nanoco's core activities are the generation and development of high performing nano-materials. This includes applications in the electronics industry and also CFQD® quantum dot products for use in the display sector.

Our goal is to apply our proven IP, technologies and expertise to a point where they can be turned into products, manufactured cost effectively and commercialised in conjunction with chosen partners. The Group is in the process of expanding its Runcorn production capacity to support this targeted growth.

Revenues today are driven by commercially focused development projects with end users supplemented by small scale sale of products and licence fee income. The Group is currently focused on potentially transformational opportunities to change this balance to be driven by product sales in commercial quantities.

Output and reinvestment
The products developed by Nanoco are based on innovative approaches and technologies. These maximise the benefit of the capabilities, qualities and performance characteristics of our materials. Nanoco is working to incorporate its various nano-materials into new and existing customer products due to their technological superiority over what's currently utilised. We will continue to invest in research.

Our key strengths

Resources
Development of successful CFQD® quantum dot products and other nano-materials is achieved by our highly skilled scientists applying specialist proprietary techniques and technologies to address market opportunities and customer needs. We use our existing financial resources to fund our developments along with grant income, where applicable. The potential for our products is significantly enhanced through our licensing agreements with major multi-national companies.

Expertise
We operate a comprehensive process to identify, screen and prioritise potential concepts for new products and technologies. This involves our own scientific and commercial teams, in collaboration with our partner licensees and customers. Our portfolio of issued patents and pending patent applications continues to grow annually. We supplement our in-house innovation, where appropriate, by in-licensing and, potentially, by targeted acquisition.

Agility and responsiveness
We take advantage of our small scale and agile workforce to be able to respond to complex and challenging customer requirements much more quickly than the competition. This undoubtedly helped us in being the partner of choice in our new nano-material venture in the electronics industry.

3
key licensees in display

1
key customer in nano-materials

654
patents granted/pending

How we create value

Customers and partners

We assist customers in exploiting the full benefit of our uniquely produced nano-materials for use in a range of market sectors. Our specialist teams can solve complex customer challenges across a range of market sectors at a faster pace than much larger but slower organisations. We work with our partners to enable them to fully exploit our technology, thereby maximising their opportunity to generate revenues and profits in markets that are expected to grow rapidly when the tipping points are reached for adoption of the requisite technology.

Employees

We aim to:

- attract, develop and retain the best talent;
- recognise and reward success;
- value the diverse contributions of our people;
- create a flexible working environment in which people feel trusted, safe, supported and healthy; and
- share values that reflect what matters to our people.

Shareholders

We are strongly positioned to compete in markets which require the high performance characteristics of our nano-materials, whether they be in electronics, display, life sciences or specialist lighting. We are adapting our commercial strategies in each of these markets to respond to near-term revenue opportunities while maintaining our core R&D activities to maintain our leading edge technologies.

Whilst our current focus is primarily on the near-term electronics industry opportunities, we are maintaining our research focus on materials for use in the display market to ensure that they stay at the forefront of performance and capability. Our platform technology allows us to address multiple market opportunities in parallel, while we work to ensure we do not dissipate our efforts through a lack of focus.

42.5p
share price at 31 July 2018

OUR MARKET OPPORTUNITIES

The Group's nano-material platform technology supports opportunities across a wide range of markets and end-user applications.

	Nano-materials	Display	Lighting
Initial application	Nano-materials for use in the electronics industry – confidential to the customer	Monitors	Horticultural lighting initially focusing on vegetables and sports turf Light therapy (crosses into Life sciences)
CFQD® quantum dot advantage	Nanoco's high level of expertise and IP in this area are the key advantages	Scalable, reliable, cost effective and free of toxic heavy metals	Enhanced plant growth, photodynamic therapy for pain management and skin treatment
Key partnerships	The US Company	Dow, Merck and Wah Hong	Commercial lighting and medical device companies
Strategy	Produce high quality materials to demanding technical specifications and then grow the business	Develop market in gaming monitors and then move to higher volume TV applications	Grow business using existing supply chain
Status	The new production facilities and development work are progressing well	First commercial products on market in 2019	One commercial contract signed

	Life sciences	2D materials	Solar
Initial application	Image-guided surgery, cancer diagnostics and targeted therapy	Electronics, optoelectronics and catalysis	Printable thin-film CIGS solar cells
CFQD® quantum dot advantage	Enhanced tumour imaging and diagnosis	Advantages gained by incorporation into existing applications • Technological • Economic	Low-cost solar energy
Key partnerships	University College London; Cancer Research UK	University of Manchester	Kinetix Corporate Finance
Strategy	Evaluating options including spin out and fund as stand-alone entity	Spin out or further funding	License the business to a third party
Status	Proof of concept; toxicology testing in hand	Establish new blue emitting 2D material	Process is ongoing

OUR STRATEGY

MEETING OUR CUSTOMERS' NEEDS

Nanoco's strategy is to focus on meeting the needs of its customers through the application of its scientific know-how and innovative nano-material technology.

1 Growth

Grow revenue
Revenue growth is key to the Group becoming self-sustaining financially while continuing to invest in R&D for future products.

Primary focus on nano-material and display industries
Revenues from nano-materials have commenced in this financial year following a new contract with the US Company. There is potential for significant future growth if adopted in multiple applications and markets.

In the display industry external analysts forecast significant growth for CFQD® applications as the likely solution for increasingly demanding technical performance requirements. The Group operates a hybrid strategy of technology licensing non-exclusively to Dow and Merck and own manufacture and direct supply to service the display industry. This hybrid strategy allows the widest coverage of the Group's technology in the display field.

Performance in 2018
Billings grew by £5.4 million compared to last year to £6.5 million. Revenues grew by 150% to £3.3 million driven by nano-materials. Revenues remain modest compared to the opportunity ahead of us and the display market has been slower to develop than envisaged.

Future focus
Focus is on converting current opportunities into revenues with a strong emphasis on nano-materials opportunities. In Display, gaming monitor projects represent the clearest niche opportunity in the short term. We are exploring opportunities with a number of potential customers in the display industry.

Link to key performance indicators
- Year-end cash and short-term deposits.
- Revenue.
- Loss after tax.
- Total billings.

Link to risks
- Strategic.
- Operational.
- Financial.

2 Investment

Continue to invest in R&D
Investment in R&D to improve current products and also to develop new products remains a key part of our strategy.

Patents
Patents protect our high quality IP and we continue to create new IP and protect existing IP to maintain our competitive advantages.

Develop in-house capability and capacity
We have invested in expanding our manufacturing capacity and in-house production remains a key part of our strategy.

Performance in 2018
R&D expenditure fell in 2018 compared to 2017 due to cost savings implemented as a result of the cash position of the Group in the previous year. Nevertheless, important progress was made during the year, especially in improvements in product performance.

Future focus
We will continue to invest in R&D in order to remain at the forefront of this technology and to open up new market opportunities.

Link to key performance indicators
- Year-end cash and short-term deposits.
- Total investment in research and development.

Link to risks
- Strategic.
- Compliance.

3 Licensing

Work with licensing partners to assist them in maximising their opportunity in manufacturing

Our licensing partners have the potential to bring strong benefits to the Group and provide key routes to market for our products. Licensed partners can bring significant extra capacity and resources to address the expected growth in the market for CFQD® products.

Performance in 2018

During the year we continued to work with our licensing partners to assist them in exploiting their licence to our technology.

Future focus

We will keep supporting our licensing partners to maximise the benefit to all parties.

Link to key performance indicators

- Portfolio of patents and patents pending.

Link to risks

- Strategic.

LIGHTING

HELPING TOP ATHLETES RECOVER FROM INJURIES FASTER

Nanoco is working with CareWear® Corp., a developer and manufacturer of patented wearable therapeutics that emit specific wavelengths of light to help professional athletes and patients recover from injuries faster.

CareWear's FDA registered light therapy delivery system features the first fully flexible, wearable, ultra-slim light patches that integrate Nanoco's CFQD® quantum dot films, along with a proprietary printed LED substrate, and a hydrogel interface to adhere the patches to the skin.

CareWear's light patches deliver PhotoBioModulation ("PBM") therapy using a combination of blue and red light to relax muscles, improve circulation and treat inflammation, which reduces pain and promotes tissue healing following injury.

Recent university research has shown that CareWear's wearable therapeutics have a significant effect on recovery from exercise. Professional sports teams are beginning adoption of CareWear's light patches as part of the initial deployment strategy into the sports markets. CareWear® is currently shipping product in commercial quantities and anticipates its wearable light patches to become a standard of care for the immediate treatment of soft tissue injuries and reduction of recovery time following intense activity.

ILLUMINATED BY OVER 5,000 LEDS

OUR KEY PERFORMANCE INDICATORS

MONITORING OUR BUSINESS

The key performance indicators that we use to monitor our business are as follows.

MEASUREMENT	WHY IT IS IMPORTANT	RESULTS	LINK TO STRATEGY

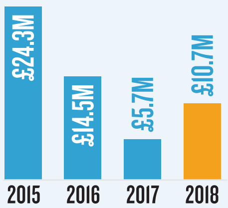
Year-end cash and short-term deposits

Measurement: This measures the availability of cash to fund the Group's activities.

Why it is important: Availability of sufficient liquidity is essential, especially where commitments are made to carry out self-funded research and development activities.

It is an area of focus in particular while the Group has not yet achieved commercial levels of material production.

Results: Cash balances increased due to a fundraising of £7.9 million during the year offset by losses incurred.



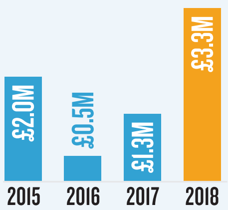
Link to strategy: 1 2

Revenue

Measurement: The amount of revenue as shown on the income statement.

Why it is important: Revenue is a key measure of the growth of the Group's business. It is also a reflection of the maturity of the Group's business model as we aim to move from an R&D biased activity base to one driven by commercial levels of material production and sales.

Results: Revenue increased as a result of new activities with the US Company.



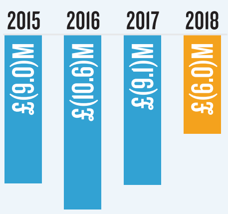
Link to strategy: 1

Loss after tax

Measurement: The amount of loss after tax as shown on the income statement.

Why it is important: This is a key measure and gives an indication of the stage of development of the business.

Results: Lower loss due to increased revenues and a reduced cost base compared to the previous year.



Link to strategy: 1

KEY

1 Growth 2 Investment 3 Licensing

MEASUREMENT | **WHY IT IS IMPORTANT** | **RESULTS** | **LINK TO STRATEGY**

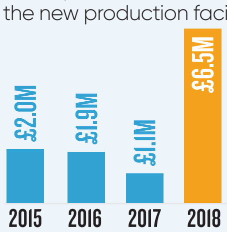
Total billings

Measurement: Total billings is the sum of invoices raised for revenue, other operating income and deferred revenue.

This measure is reconciled to revenue on page 25.

Why it is important: This is an important measure as it shows the total level of value created regardless of when the revenue is recognised. Cash flows are dictated by the levels of billings.

Results: 2018 included revenues with the US Company and cash advances of £2.9 million against future product sales and was used to fund the new production facilities.



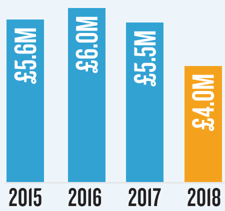
Link to strategy: 1

Total investment in research and development expenditure

Measurement: Total investment in research and development costs, including direct and indirect overheads, of all research and development activities as shown on the income statement.

Why it is important: The successful development of complex products and technologies is the Group's core skill and defines the Group's competitive advantage.

Results: As anticipated, investment in research and development expenditure was lower in 2018 than in 2017 due to cost reductions commenced in December 2016.



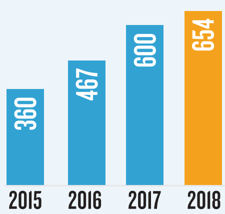
Link to strategy: 2

Portfolio of patents and patents pending

Measurement: This is the total number of active patents and patents pending.

Why it is important: The value of the business is strongly linked to the level and length of protection of the Group's intellectual property. Such protection is reflected in the licences that the Group is able to negotiate with partners wishing to access our know-how.

Results: Continued growth in the portfolio to protect the Group's intellectual property and create future value.



Link to strategy: 3

PRINCIPAL RISKS AND UNCERTAINTIES

SUCCESSFULLY MANAGING RISK

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 its control or capable of complete mitigation or protection through insurance.

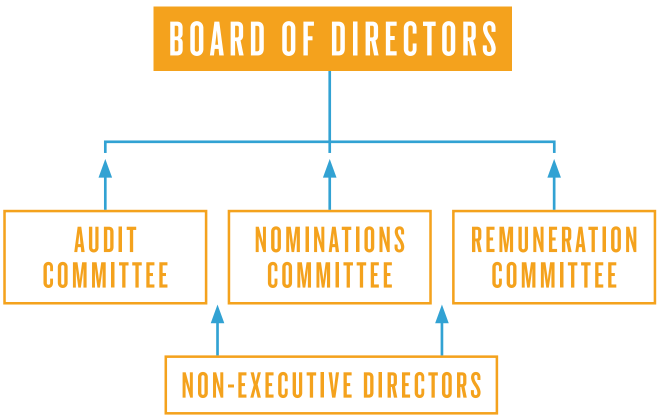
Specifically, a number of the Group's products and potential applications are at a research stage and hence it is not possible to be certain that a particular project or product will lead to a commercial application. Other products require further development work to confirm a commercially viable application. Finally, a number of products are considered commercially viable but have yet to see demand for full-scale production-level quantities. There are a range of risks therefore that are associated with the different stages of product development as well as for the Group as a whole.

The Board has established a routine process for carrying out a robust risk assessment which evaluates and manages the principal risks faced by the Group. The Board reviews the process and a detailed review of risks was undertaken by the Audit Committee during the financial year ended 31 July 2018. The Board has also established an acceptable level of risk (risk appetite) which is used to inform the scale and urgency of actions required. Where risks are deemed to be outside management control, efforts are focused on mitigating any potential impact. Where all practical measures to prevent or mitigate risks have been taken and a residual element of risk still remains, these risks are accepted by the Group.

Risks are evaluated with respect to probability of occurrence and the potential impact if a risk crystallised.

Where the Group has identified risks, these are monitored with controls and action plans to reduce the probability of a risk crystallising and the impact of each potential event if it did occur.

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 able to be self-funding. As described on page 23, the Directors consider that a material uncertainty exists regarding the Group's ability to implement the required cost savings within the necessary timeframe, as indicated in the downside case, should expected revenues not be secured. The new agreement with a US Company, agreed in early 2018, provides attractive cash-generating opportunities. However, the natural consequence of having this attractive new agreement is that the Group is now inevitably exposed to a new risk in the short term of "key customer reliance". The Group is exposed to the risk of any delays in the future supply of commercial quantities of products to this new customer in the same way that the Group is exposed to delays in the widespread adoption of quantum dots in display markets.



These factors both increase the risk of not becoming self-funding before existing cash resources are exhausted. The terms of the agreement with the US Company also require specific deliverables and milestones to be achieved. Both are being actively managed and as milestones are achieved and additional customer relationships are formed these risks will inevitably reduce. As set out in the Viability statement on pages 22 and 23, commercial negotiations are ongoing to secure additional revenues to mitigate the exposure in this area. As set out in the Going concern statement on page 23, management has identified the short-term actions that would need to be taken if no further sales contracts are agreed.

Risks are broadly categorised as strategic, operational, financial or compliance. The table opposite focuses on those risks that the Directors believe are the most important currently faced by the business. Other risks may be unknown at present and some that are currently rated as low risk could become material risks in the future. The Group's risk management process tracks risks as they evolve and change.

RISK DESCRIPTION	POTENTIAL CAUSES AND IMPACT	MITIGATION	CHANGE	LINK TO STRATEGY
Strategic				
Lack of widespread adoption (or further significant delays) of CFQD® products in the display market.	Any of the following factors would have a potentially adverse impact on the Group's commercial prospects and cash flows: • Nanoco technology does not become fully accepted by the market; • drawn-out qualification processes by display customers; • stronger than anticipated competition from non-CFQD® solutions; • Samsung dominates the mainstream display market and remains vertically integrated, inhibiting access to the market; and • licence partners are slow to generate their own sales with a knock-on effect on Nanoco royalty income.	Actively pursue alternative markets such as nano-materials, lighting, 2D materials and life sciences as substitutes for a lack of uptake of CFQD® in the display market. High technical sales engagement with all the major display OEM brands and all parts of the display supply chain. Working actively where possible with customers to expedite their approvals processes. Rapid product development. Cross-training of teams to ensure flexibility to serve different markets and customers reduces risk of excess cost base.	▶	1 2 3
Customer concentration risk.	Reliance on a small number of key customers (one customer was 90% of revenue in FY18) exposes the Group to risk of delays in the customer's own supply chain over which the Group can exert limited influence. These delays can then have a knock-on adverse effect on the Group's expected revenue streams.	Commercial strategy in the medium term is to dilute customer concentration risk by selling into various markets, through various channels and to a range of customers. In the short term the customer concentration risk is partly mitigated by close project management to ensure the Group delivers on its targets to schedule and negotiation of contracts for additional revenues.	NEW	1 2 3
Rapid commoditisation of products.	Overcapacity for CFQD® products leads to price and profit margin erosion.	Phased capacity expansion. Increase pace at which new generations of CFQD® products are brought to market.	▶	1 2 3

KEY

▶	No change in risk	▲	Increase in risk	▼	Decrease in risk	NEW	New risk identified during the year
1	Growth	2	Investment	3	Licensing		

PRINCIPAL RISKS AND UNCERTAINTIES CONTINUED

RISK DESCRIPTION	POTENTIAL CAUSES AND IMPACT	MITIGATION	CHANGE	LINK TO STRATEGY
Strategic continued				
Loss of key personnel.	While the Group maintains a high level of protected documented IP, our staff remain a critical asset with significant levels of technical and sector know-how. Loss of key personnel would have an adverse impact on the development and commercialisation of the Group's products.	The Group offers rewarding career opportunities that allow our staff to develop new skills combined with the ability to pursuing interesting research ideas. The Group continues to review remuneration to ensure that appropriate reward and incentives accompany the fulfilling work environment.	►	1 2 3
Intellectual property.	Competitors unlawfully infringing Nanoco's IP. Nanoco not getting value for its investment.	Nanoco constantly scans the market for signs of infringement. Prosecute infringers.	▲	1 2 3
Operational				
Meeting product specifications.	Technical specifications are increasing as QD technology matures. If Nanoco fails to meet specification then competitor products will be selected.	Active product lifecycle management with new generations of each product to operate within new specifications. Similar approach to production process improvements.	▲	1
Manufacturing capacity is unable to fulfil customer demand.	Customer markets are large and a significant demand request would require additional capacity. Failure to service a customer could jeopardise commercial relationships.	Capacity flexibility can be delivered by additional shift working in production facilities, use of scale-up labs for smaller overrun quantities and access to tolling manufacturers and also to licensee production capacity. Conservative plant design to reduce technical risks. Accelerating R&D trials with extended hours of working.	NEW	1

KEY

► No change in risk
▲ Increase in risk
▼ Decrease in risk
NEW New risk identified during the year

1 Growth
2 Investment
3 Licensing

RISK DESCRIPTION	POTENTIAL CAUSES AND IMPACT	MITIGATION	CHANGE	LINK TO STRATEGY
Financial				
Lack of adequate resources to sustain the Group until it reaches a self-sustaining level of operating cash flows.	Revenues from own product sales, services rendered and licensee royalties do not materialise as planned. The Group is unable to carry out its operations and hence cannot deliver on medium-term or strategic goals.	Cash will continue to be prudently managed. Opportunities with the US Company potentially provide additional cash milestones/revenues. Cost reduction actions identified if necessary.	▲	1
Compliance				
Major EHS issue.	Failure to follow existing procedures or a new unforeseen risk results in injury to staff, equipment, reputation and finances and potential loss of operating licences.	Extensive and ongoing efforts to continuously improve procedures. Renewed leadership focus on the "tone at the top" and cultural change. Continuous training of staff in risks and how to mitigate risks.	►	2
Legislation to ban cadmium in displays is delayed (RoHS Exemption 39).	Cadmium-based quantum dots ("CdQDs") are a key competitive product and any delay to them being phased out adversely impacts the Group's ability to generate revenues in the estimated timescales.	Currently the usage of CdQDs is to be phased out in Europe in October 2019.	►	2

VIABILITY STATEMENT

ENSURING VIABILITY

In accordance with the provisions in the UK Corporate Governance Code (C.2.2 of the 2016 revision), the Directors have assessed the viability of the Group's business model and determined that a two-year period continues to be a suitable period to be utilised. The Directors' assessment has been made with reference to the Group's current strategy, principal risks and material uncertainties as described in this Strategic report.

The Directors consider that a two-year period is appropriate for considering the viability of the Group's business model. This reflects the rapidly evolving nature of the markets for the Group's products and the principal risks and uncertainties faced by the Group. In addition, during the year the Group successfully adapted the market and product focus of our business model to an emerging and potentially significant new opportunity. The Directors acknowledge that even within a two-year time horizon, the rate of change in our markets and the potential for new business opportunities can still present forecasting challenges.

The Group's business model is built on the platform technology of nano-materials. The Group has a deep technical understanding of the performance characteristics of these materials and critically also has a patent-protected method for their production at a scale not available to any of our competitors. The fact that the nano-materials made by the Group have been actively investigated for use in markets ranging from display, to specialist lighting, life sciences, solar applications and most recently in the electronics industry demonstrates very clearly that they are a platform technology capable of deployment across multiple market sectors.

At present the most compelling short-term commercial opportunity for our materials is in the electronics industry. This is a change from prior years when display was seen as the opportunity closest to commercial scale-up. The change is more reflective of the rapid appearance and evolution of the electronics opportunity rather than a reversal in the Group's interest in the display market, though it is fair to say that the display market remains challenging and the slow pace of change is closely linked to developments in a complex supply chain driven by end customer product launches. The electronics opportunity is in sharp contrast to this where the Group is working in close collaboration with the end customer and hence is able to move the intervening supply chain at a faster pace.

The Group expects its activities and performance in the coming two-year period to be dominated by electronics industry opportunities. The Group has recently significantly expanded its Runcorn facility to be able to scale up production quantities of nano-materials destined for this sector. The US Company provided funding for the facility and the Group is in active discussions regarding further opportunities for collaborative working. The opportunity in the electronics industry is potentially very significant; however, there are technical challenges that must be overcome to be able to exploit those opportunities to the full. Also, the commercialisation time frame is subject to the performance of the overall supply chain and hence is not wholly within the Group's control.

The Group will continue to support the development of enhanced performance of our CFQD® quantum dot for use in the display market. The short-term focus remains on the market niche for high performance gaming monitors with market for mass produced television screen applications more likely to be in the future. In the display industry more generally, the Group maintains a number of non-exclusive licence agreements. Dow and Merck are licensed to manufacture CFQD® quantum dot products and they can sell their own manufactured products as well as CFQD® quantum dot products purchased from the Group. Wah Hong is licensed to produce and sell film containing CFQD® quantum dot products purchased from Nanoco. Hence the Group is not dependent on one partner or channel for potential future sales in the display market. The Group will continue to support these channel partners with improved technology to enhance those partners' own commercial opportunities which, if realised, will also benefit the Group with royalty and licence fee income.

Separately, the Group continues to fund research and development in the Life sciences and Horticultural Lighting business lines. Both business lines and the application opportunities they create are discussed at more length in the Strategic report on pages 2 to 32.

Key issues considered by the Directors in evaluating the viability of the Group's business model are:

- Customer concentration risk.
  - The new agreement announced in February 2018 with a US Company adds potentially significant, longer-term opportunities for the Group and also creates an important source of short-term revenue. Income from the US Company in the year ended 31 July 2018 significantly exceeded revenues from the display market and this is expected to continue in the next two years. While this is a welcome development, it does expose the Group to the inevitable new evolutionary risk of having a significant customer revenue concentration.
- Continuity of sales to the US Company for the foreseeable future.
  - During that time, the Group expects to be able to deliver the product developments and commercial supplies requested in the timescale, quantities and level of quality required.
  - Significant resource is being devoted to the workstreams currently agreed with the US Company. An important milestone in the first agreement was completed in April 2018 and another has been largely completed since the financial year end. Both delivered revenue and cash flows to the Group's results in the year ended 31 July 2018 and will do in the year ending 31 July 2019 (revenue measured by reference to the current revenue recognition policy in accordance with IAS 18).
  - The project to build new manufacturing facilities in Runcorn (UK) is proceeding on plan. During the financial year ending 31 July 2019, revenue-generating activities are expected to include completion of the contracted activities in progress at 31 July 2018 and, in addition, the production of sample materials, stress testing of the facility and other potential material performance development work. These activities are in some cases still dependent on the outcome of further commercial negotiations whereas some are completion of activities already under contract and commenced in the year ended 31 July 2018. Commercial scale production is expected to commence in the second half of the 2019 calendar year. The expansion of our manufacturing facilities was funded by the US Company and will be repaid out of future commercial sales at a fixed rate per kilogram sold. The repayment rate is calculated to ensure that the Group maintains a healthy cash flow during the repayment period. This new source of revenue from nano-materials could lead to other opportunities and further improvements in the Group's operating cash flows.
- Security of sources of revenue from other business lines.
  - Based on the Group's knowledge of the market and independent forecasts of the development of the display market, the Directors believe that the display market will remain a viable and growing market for the Group's CFQD® products for a number of years.

- The Group also has a number of channel partners who have invested in the Group's technology and are seeking to develop their own direct customer relationships which will benefit the Group in the form of royalty payments calculated as a percentage of their sales. The channel partners also make certain minimum licence fee payments under pre-agreed terms which continue for the next one to two financial years.

In assessing the viability of the Group, the Directors have utilised their forecasts for the period to 31 July 2020 which take into account the Group's current and expected business activities, current cash resources (£10.7 million as at 31 July 2018) and the principal risks and uncertainties it faces. These inputs were then used to create a reasonably plausible downside stress test which included:

- a failure to win or very significant delays (over a year) in winning any additional revenue above that which is already under contract;
- the Group's ability to reduce costs in the event of adverse changes in the nano-materials opportunities discussed above and any further delays in commercialising products in the display market; and
- the Group's ability to reduce discretionary capital expenditure to preserve cash resources.

Various sensitivity analyses have been performed to reflect the possible downside scenarios as referred to above. The downside scenario assumed that no revenues were generated in the period of the assessment other than those already under contract. The Directors included a consideration of performance after the year end when assessing payments due under relevant milestones.

The results of the assessment were that the Group's base case scenario shows adequate resources for the period of the viability assessment. In the downside case scenario described above, significant management action would be required to reduce the Group's cost base and capital expenditure to match this much reduced revenue scenario. The downside scenario also shows that the Group's business model is viable when management takes the appropriate action in response to revenues being lower than forecast, however the Directors recognise a material uncertainty in this regard as described on this page. In this revised scenario the fundamental basis of the Group's business model and its patent-protected IP and know-how would be preserved.

As a result of the assessment outlined above, the Directors have confirmed that they have a reasonable expectation that the Group's business model will remain viable over the two-year period of their assessment and has the capacity to adapt to reasonably plausible downside scenarios.

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 are set out on pages 2 to 13. The principal risks and uncertainties are shown on pages 18 to 21 while the Group's financial position is described in the Financial review on pages 24 to 26. Furthermore, note 26 to the accounts summarises the Group's financial risk management objectives, policies and processes. The Group funds its day-to-day cash requirements from existing cash reserves (as is common with businesses at a similar stage of development, the Group does not currently have access to any debt facilities).

For the purposes of their going concern assessment and the basis for the preparation of the 2018 Annual Report, the Directors have reviewed the same trading and cash flow forecasts and sensitivity analyses that were used by the Group in the viability assessment noted earlier in this report. The same base case and downside sensitivities were also used.

The base case represents the Board's current expectations. The key assumptions underpinning the base case are:

- commercial production levels of nano-materials from Runcorn do not commence until the second half of calendar year 2019 (that is, the financial year ending July 2020);
- cash-generating revenue from Display, lighting and other business lines is limited to contractual amounts already agreed in royalty and licence agreements and in grant awards. While the Group continues discussions with a number of potential Display customers, in the interests of being conservative none are assumed to come to fruition during the forecast period;
- revenue-generating milestones already under contract are assumed to be achieved as good progress has already been made on these. In addition, new research service income is assumed to be generated based on active discussions and some additional new milestones under negotiation; and
- the Group's variable costs grow in line with manufacturing activities while the fixed overhead base is held broadly flat on 2018.

The base case produces a cash flow forecast that demonstrates that the Group has sufficient cash throughout the period of the forecast. The Group also has a medium-term goal to achieve self-sustaining levels of cash flows.

However, the Board acknowledges that there is a risk that some or all of these non-contracted projects may not convert to sales during the forecast period. Accordingly, the Board has identified a downside scenario in which no revenue, except that already under contract, is achieved during the period. This was considered in addition to the base case in assessing the going concern status of the business. The downside scenario could arise from a number of possible causes which include, but are not limited to, changes in key customers' supply chains, the replacement of the Group as a supplier of nano-materials, the expansion of the Runcorn facility falling short of its design specifications or the failure of our materials to meet customers' technical specifications.

In the downside scenario, the Group's cash resources would run out in the third quarter of calendar year 2019 if no action to reduce current costs is taken. Management has identified a series of mitigating actions, including cost savings and a reorganisation of its operations that could be undertaken in the event cash-generating revenues do not materialise. In this scenario the Group would enact its cost reduction plans in the current financial year ending 31 July 2019 with the objective of protecting the new Runcorn facility while reducing other manufacturing capabilities and indirect overheads. Management would aim to put in place sub-contract manufacturing agreements to satisfy future demand with a focus on existing licensees. While management has identified a number of cost savings, we recognise that our ability to deliver them in an appropriate timely manner could be constrained by other business activities.

IAS 1 Presentation of Financial Statements requires the Directors to disclose "material uncertainties related to events or conditions that may cast significant doubt upon the Group's ability to continue as a going concern". The Directors consider that the uncertainty regarding the Group's ability to implement cost savings in the downside case in the necessary timeframe meet the definition of a "material uncertainty". Nevertheless, considering the mitigating actions that can be made and after making enquiries and considering the uncertainties described above, the Directors have a reasonable expectation that the Company 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.

FINANCIAL REVIEW

CAREFUL CASH MANAGEMENT

We are carefully managing our cash resources and cost base in the period running up to the expected delivery of commercial production revenues in the first half of the financial year ending 31 July 2020.

Summary

- This approach to our cash and cost base reflects an appropriate level of caution given that there is inevitably some uncertainty surrounding the timing of commercial revenues which are not yet subject to contract.
- Revenue and other operating income increased by 114.7% to £3.4 million (2017: £1.6 million).
- Billings have increased by £5.4 million to £6.5 million (2017: £1.1 million) as a new development and supply agreement was signed during the year.
- Revenue from sale of products and services rendered accounted for 95.6% (2017: 53.6%) of revenues with the balance being royalty and licence income.
- The loss before tax was £7.4 million (2017: £10.9 million).

Results

Revenue for the year was £3.3 million (2017: £1.3 million) and the loss before tax was £7.4 million (2017: £10.9 million).

Revenue and other operating income increased by 114.7% to £3.4 million (2017: £1.6 million).

Revenue from sale of products and services rendered accounted for 95.6% (2017: 53.6%) of revenues with the balance being royalty and licence income. Revenue from sale of products was £0.2 million (2017: £0.5 million).

Revenue from royalties and licences and revenue from the joint development agreements which comprise payments from customers to gain preferential treatment in terms of supply or pricing do not have an associated cost of sale. Cost of sales increased by £0.1 million to £0.4 million (2017: £0.3 million) as a result of increased sales.

The generation of cash for the Group is important and as a result the level of billings is considered a key performance indicator. Billings have increased by £5.4 million to £6.5 million (2017: £1.1 million) as a new development and supply agreement was signed during the year.

	2018 £ million	2017 £ million
Value of sales invoices ("billings") raised during the year	**6.5**	1.1
Movement in deferred income from last year end to this year	**0.1**	0.5
Less revenue deferred to future years	**(3.1)**	–
Revenue and other operating income per consolidated statement of comprehensive income	**3.5**	1.6

The decrease in research and development expenditure of £1.5 million to £4.0 million (2017: £5.5 million) comprises decreases in R&D labour costs of £0.9 million, material costs and utilities totalling £0.6 million. Labour costs represent 77.4% (2017: 72.8%) of total R&D costs with the balance of costs comprising materials and utility costs.

Total payroll costs (before the charge for share-based payments) decreased by £0.4 million to £5.3 million (2017: £5.7 million). The decrease in payroll costs is attributable to a 21.8% decrease in average staff numbers compared to 2017 largely due to the restructuring that occurred in December 2016. The decrease in administrative costs of £0.3 million to £6.5 million reflects decreased professional fees (£0.3 million) and depreciation (£0.2 million) offset by increases in employee costs (£0.3 million).

Non-GAAP measures

The non-GAAP measures of adjusted operating loss and loss before interest, tax, amortisation and share-based payment charges ("LBITDA") are provided to show the operating loss and loss before interest and tax, before including non-cash charges and large non-recurring items, in order to give a clearer understanding of the loss for the year that reflects cash outflow from the business.

The adjusted operating loss* for the year ended 31 July 2018 was £7.2 million (2017: £10.7 million).

LBITDA was as shown in the table below.

The decrease of £3.3 million in LBITDA compared to 2017 is a result of the higher revenue leading to an increase in gross profit of £1.8 million, a decrease in other operating income of £0.1 million and a net decrease in R&D and administrative costs of £1.6 million (excluding the items added back in the table below).

The loss before tax was £7.4 million (2017: £10.9 million).

The tax credit for the year is £1.4 million (2017: £1.8 million). The tax credit to be claimed, in respect of R&D spend, is £1.4 million (2017: £1.8 million). Overseas corporation tax was £nil during the year (2017: £0.1 million). There was no deferred tax credit or charge (2017: £nil).

Cash flow and balance sheet

During the year cash, cash equivalents, deposits and short-term investments increased by £5.0 million to £10.7 million (2017: £5.7 million) largely as a result of the fundraise of net £7.9 million offset by cash outflow from operating activities. At 31 July 2017, cash and cash equivalents include an amount of £840,000 received from a customer for the purchase of capital equipment. The cash cannot be used for any other purpose.

Tax credits of £1.8 million (2017: £2.0 million) were received during the year.

The Group increased its capital spend in tangible assets in the year to a total of £2.2 million (2017: £0.4 million). Expenditure incurred in registering patents totalled £0.8 million (2017: £1.2 million) during the year 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.

On 14 November 2017 the Company's shareholders voted in favour of a placing of 19.9% of the Company's issued share capital raising approximately £7.9 million net of costs. This fundraise strengthened the Company's balance sheet and helped to alleviate going concern issues.

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 are provided in note 26 to the financial statements.

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 Sterling and also has US Dollar and Euro revenues. The Group is therefore exposed to movements in those currencies 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. The Group does not take out forward contracts against uncertain or forecast income.

	2018 £ million	2017 £ million
Operating loss	**(7.4)**	(10.9)
Share-based payment charge	**0.2**	0.2
Adjusted operating loss*	**(7.2)**	(10.7)
Depreciation	**0.5**	0.7
Amortisation	**0.5**	0.5
LBITDA	**(6.2)**	(9.5)

* Adjusted operating loss is an APM used by management to show the underlying performance of the business and excludes non-cash share-based payment charges.

DISPLAY

GROWING GAMING MARKET OPPORTUNITY

Quantum dot technology is leading the way of the next generation of high end gaming monitors.

Gaming monitors require very high frame rates and fast response times in order for games to run smoothly without any motion blur, stuttering or input lag. There is also a growing demand from gamers to have displays that have high contrast, wide colour reproduction and resolutions of 4K and above. Current phosphor technology used in high end displays to reproduce wide colour gamut has serious problems when it comes to high frame rates, making games stutter and blurry.

Nanoco's CFQD® quantum dot technology has extremely fast response time and works with high frame rate displays while also being compatible with high dynamic range for super high contrast displays. CFQD® quantum dot technology enables monitors to provide gamers with vivid, life-like colours for a rich and immersive gaming experience like no other.

FINANCIAL REVIEW CONTINUED

Foreign exchange management continued

There were no open forward contracts as at 31 July 2018 (2017: none). The Group's net profit and its 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 are summarised in note 26 to the financial statements and were based on the year-end position.

Significant accounting judgements

Set out below are the key accounting matters and judgements assessed during the year:

- Revenue recognition and deferred income.
- Carrying values of intangible assets.
- Going concern.
- The impact of IFRS 15 Revenue from Contracts with Customers.

The Audit Committee was closely involved in the above accounting matters and judgements and further details are set out in the Audit Committee's report.

A key area is the assessment of going concern due to the existence of the material uncertainty regarding management's ability to implement the necessary cost savings in an appropriate timely manner should expected revenues not be secured and further details of this assessment are set out on pages 22 and 23. Nevertheless, considering the mitigating actions that can be made and after making enquiries and considering the uncertainty described above, 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.

Summary

We are carefully managing our cash resources and cost base in the period running up to the expected delivery of commercial production revenues in the first half of the financial year ending 31 July 2020. This approach to our cash and cost base reflects an appropriate level of caution given that there is inevitably some uncertainty surrounding the timing of commercial revenues which are not yet subject to contract. There is then an associated material uncertainty which is referenced in the Going concern statement with regard to the timeliness and effectiveness of any contingency plan around our cost base that has to be implemented in the event of commercial delays.

The Group has sufficient financial resources to sustain the expected level of operating losses and cash burn assuming commercial production revenues are achieved early in the first half of the financial year ending 31 July 2020. On delivering commercial production revenues the Group then expects to be able to significantly reduce its operating losses and cash outflows with a medium-term goal to deliver self-sustaining levels of cash generation.

Brian Tenner
Chief Operating Officer and
Chief Financial Officer
16 October 2018

SUSTAINABILITY

MAKING AN IMPACT

The Group recognises that, although its primary responsibility under UK corporate law is to its shareholders, it also has responsibilities towards its employees, customers, suppliers and also, ultimately, those consumers who benefit from its products, the broader public and the environment.

Each stakeholder has different interests, some of which are listed below:

Employees

Nanoco acknowledges its responsibilities for the health and safety of its employees for their training and development and for treating them fairly. Further information about its employment policies is outlined overleaf.

Customers

Nanoco is responsible for the quality and safety of its products and for the performance of its research and development projects.

Shareholders

Nanoco seeks to increase shareholder value over the long term.

Health and safety

Nanoco recognises that providing a safe, secure and healthy working environment is essential and contributes to productivity and improved performance. The health, safety and welfare of all of our employees, contractors and visitors is taken seriously across the entire organisation, with ultimate responsibility lying with the CEO. Health and safety performance is a standing item on each Board and Executive team agenda, and is also discussed within departmental meetings. The Group's health and safety policy is reviewed annually. In addition, the Board has established an Environmental, Health and Safety ("EHS") Committee to oversee the implementation of policy and involve staff in generating improvement plans.

There are various improvement and reporting systems in place to monitor the performance of the Group's health and safety management system. These initiatives include but are not limited to:

i) reporting all incidents (including near misses) with appropriate ownership, root cause analysis and action tracking systems;

ii) communication of relevant topics and incidents via weekly toolbox talks to all departments;

iii) monthly and quarterly leadership safety and observation audits with the focus on immediate action resolution by the executive or senior manager leading the audit;

iv) monthly departmental audits with assigned action tracking processes in place to address issues;

v) monthly health and safety reports issued across the organisation to communicate performance against annual metrics and progress on key improvement initiatives and projects;

vi) annual health checks for staff, including tests for chemical exposure where required; and

vii) annual occupational chemical exposure tests using fixed and personal monitors.

Health and safety continued

A risk assessment programme is in place to identify and mitigate the risks from our operations. These assessments include but are not limited to:

i) the storage, handling and processing of hazardous substances;

ii) fire safety and emergency evacuation;

iii) use of mechanical and electrical equipment; and

iv) other workplace operations involving manual handling and ergonomic risks, working at height and other hazards identified as part of the EHS improvement programme.

All risk assessments are documented and actions assigned and reviewed according to the defined frequency. All research and development functions are actively encouraged to, wherever possible, eliminate or reduce the levels of hazardous substances used in our products and processes. All relevant chemical legislation and regulatory frameworks are used to assess the suitability of a substance prior to use as part of the risk assessment process. Standard operating procedures are documented and regularly reviewed.

All documents are reviewed and approved via the electronic document management system. A health and safety induction programme is in place for all new staff and visitors/contractors performing work on our premises. Staff are trained in standard operating procedures, hazard awareness, generic workplace health and safety risks and behavioural safety expectations applicable to their role within the Group.

A cross-functional health and safety team meets on a monthly basis with representation from all areas of the Group, including the Executive team. Effective inputs and outputs from the team are designed to facilitate a greater focus on health and safety and to actively encourage discussions within respective groups.

The Group has an excellent safety record and there have been no reportable incidents to the respective UK authorities across all our operations. Nanoco is committed to the continuous improvement of the health and safety management system and have recently completed the health and safety laboratory ("HSL") safety culture survey for the third time.

The survey showed that, across the eight factors in the HSL model, there has been a year on year improvement in each year since 2016 in how staff rate our safety performance. All our results now exceed the average scores for chemical and pharmaceutical industry companies. Based on the results we have identified specific areas for further improvement which are being tracked via the health and safety management plan and reported to all staff, the Executive team and the Board.

Environment

Nanoco is committed to protecting the environment in which our activities are conducted. This commitment is directly expressed in our decision to develop our CFQD® quantum dot products to be free of toxic cadmium, which is still widely used by our competitors in their quantum dot products.

Nanoco has participated actively with regulators on the use of cadmium-based quantum dots in displays and LED light products. The European Commission ("EC") revised the RoHS exemption last year so that it immediately ceased for lighting and will end on 31 October 2019 for display products, after which the normal RoHS limit of 100ppm will apply. Nanoco expects that regulations in other key markets, including China, will fall in line with RoHS in future. Meanwhile, our contacts with display companies indicate that most already accept the need for new display products to be cadmium free – especially the world-leading brands in television, computer monitor and laptop displays. The exemption is subject to a final review by the EC as one European lighting company and one Chinese QD company requested an extension in April.

The EC has also started a project to review the list of toxic substances that are restricted under RoHS regulations and to review how to evaluate exemption requests. Indium phosphide ("InP") is included in materials to be considered for future inclusion in the RoHS restricted materials list because it is rated as a probable carcinogen. However, it is far less harmful and does not persist in the environment as cadmium does. Nanoco does not use InP in its CFQD® quantum dots, which have been tested and shown to be non-toxic for potential medical use in cancer treatments. The EC has also included in this package of work one new request for cadmium-based QDs to be used in "on-chip" LED lighting applications. Nanoco is actively participating in the review process for the proposed RoHS changes and continues to champion the use of safer alternatives to cadmium-based QD.

The Group's environmental policy aims to foster a positive attitude towards the environment and to raise the awareness of employees of responsible environmental practices at all sites operated by the Group. The Group endeavours to ensure compliance with all relevant legislation and regulatory requirements and, where practical and economically viable, standards are developed in excess of such requirements.

The CEO has responsibility for reporting on relevant environmental matters to the Board. There have been no incidents to report to the authorities across all our operations. Shareholders and other interested parties are encouraged to use the online version of the Annual Report and Accounts rather than requesting hard copies. Interested parties are encouraged to visit the Group's website or use the regulatory news services instead of a hard copy. Employees are also encouraged to recycle paper, plastic, glass, cardboard and cans wherever possible.

Greenhouse gas ("GHG") reporting

Under the Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013, the Group is required to state the annual quantity of emissions in tonnes of carbon dioxide equivalent from activities for which the business is responsible, including the combustion of fuel and the operation of its facilities and resulting from the purchase of electricity, heat, steam or cooling by the business for its own use.

As both of the Group's UK premises are in multi-occupancy sites it places reliance upon the respective landlords to provide the data needed to determine emissions. Our laboratories require continuous negative pressure environments and, consequently, it is not possible to set realistic reduction targets in the consumption of electricity.

Our gas consumption is used for heating premises and site costs are shared between tenants on the basis of area of occupancy. In the absence of significant amounts of revenue from the sale of commercial products, the emissions of the business primarily arise from the occupation of its research and administration facilities rather than from revenue related production operations.

Emissions in respect of the Group's US office are considered to be negligible. Our emissions, based on appropriate conversion factors published by the Department for Business, Energy and Industrial Strategy, for the current year are shown in the table opposite.

Waste

During the year, the Group generated 37.7 tonnes of waste (2017: 57.7 tonnes) and recycled 11.8 tonnes of this (2017: 46.8 tonnes). The Group engages a specialist contractor to incinerate batches of chemicals and dispose of other materials no longer required. All waste contractors are assessed to ensure the waste hierarchy approach is applied to all of our materials handled, and that their operations and systems are compliant with the relevant legislation. Audits are performed every three years in line with our duty of care as a waste producer.

Other environmental matters

Consideration of the benefits to the environment is a significant factor in decisions regarding investments to upgrade the Group's research and development facilities in Manchester and Runcorn.

Video conferencing is used where possible instead of physical travel in order to reduce the Group's environmental footprint through fewer flights and other means of travel.

The Group's display, lighting and solar technologies all sit in the energy efficiency and low environmental impact arena and, as such, will enable customer companies to increase the uptake of their products while reducing their impact on the environment.

Diversity

Gender diversity

There is one female member on the Board. Although there are no females on the executive management team, there were two (2017: three) female members out of 14 (2017: 17) on the senior management team as at 31 July 2018. Women constituted 26% (2017: 24%) of the Group's employees as a whole at that date.

WHOLE PORTFOLIO CARBON GENERATION (ENERGY USE)

		2018 tCO_2e	2017 tCO_2e	Change
Scope 2	Electricity	407	721	-43.6%
	Natural gas	212	218	-2.8%
Scope 3	Air travel	166	298	-44.3%
	Total	785	1,237	-36.5%

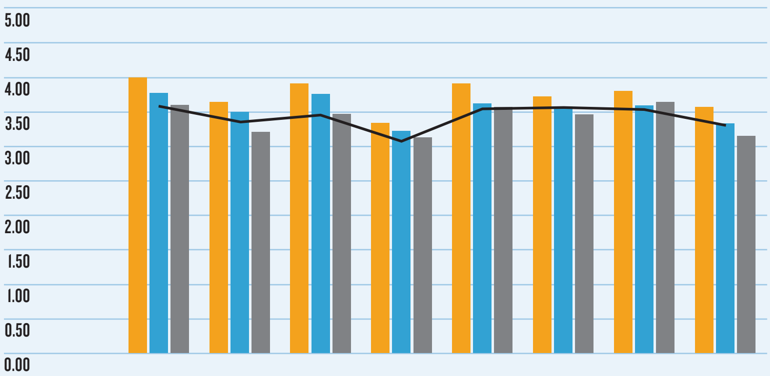
INTENSITY (tCO_2e/AVERAGE NUMBER OF EMPLOYEES)

2018	2017	Change
9.1	11.2	-18.8%

Reporting period	1 August 2017 to 31 July 2018
Baseline period	1 August 2016 to 31 July 2017
Boundary	Operational control
Reporting method	The Greenhouse Gas ("GHG") Protocol Corporate Accounting and Reporting Standard
Emissions factor source	Department for Business, Energy and Industrial Strategy, Standard Set 2018
Data changes and restatements	None

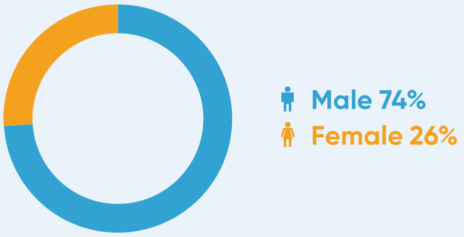
SAFETY CULTURE SURVEY

Nanoco 2016 vs 2018 and industry mean (score out of 5)

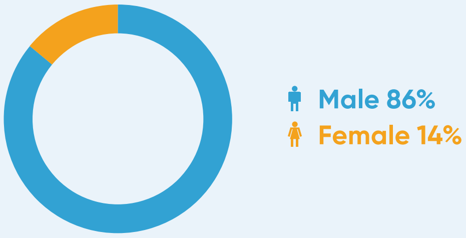


	Organisation commitment	H&S oriented behaviours	H&S trust	Usability of procedures	Engagement in H&S	Peer group attitude	Resources for H&S	Accident and near miss reporting
Nanoco 2018	4.00	3.64	3.91	3.34	3.91	3.72	3.80	3.57
Nanoco 2017	3.77	3.50	3.76	3.22	3.62	3.58	3.59	3.33
Nanoco 2016	3.60	3.21	3.47	3.13	3.57	3.46	3.64	3.15
Industry mean	3.60	3.37	3.47	3.09	3.56	3.58	3.55	3.32

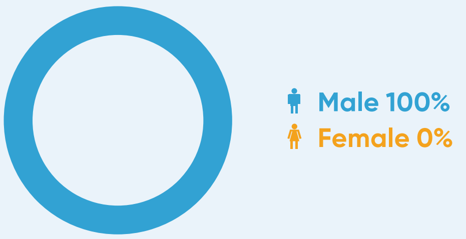
EMPLOYEES BY GENDER



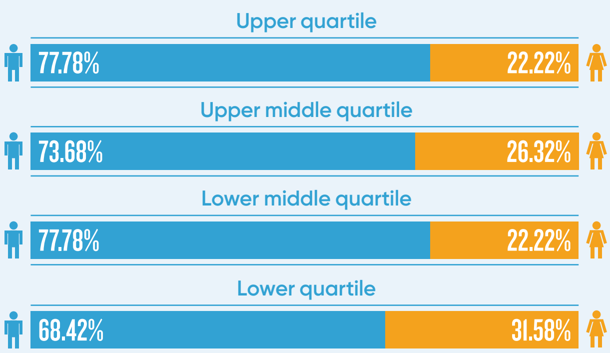
BOARD BY GENDER



EXECUTIVES BY GENDER



PROPORTION OF MALES AND FEMALES IN EACH PAY QUARTILE



With NED data	Without NED data
29.57% Mean gender pay gap	26.22% Mean gender pay gap
-0.36% Median gender pay gap	2.56% Median gender pay gap

Diversity continued

Gender pay gap reporting

The Group voluntarily analysed gender pay gap data as at 5 April 2018.

At the snapshot date of 5 April 2018, Nanoco employed 77 employees in the UK, 25.9% of whom were female. Employees work across a variety of roles in research and production environments. There are fewer women in management positions, no female representation on the executive management team and one female representative on the Board as a Non-executive Director ("NED"). Overall female representation across the quartile pay bands corresponds fairly closely to the percentage of female to male employees overall, although there are 4% fewer women in the upper and lower middle quartile and just over 5% more females in the upper middle and lower quartiles. The female NED Board member leads to a negative median pay gap. If we remove NED data from the calculations, the pay gap is positive, but still relatively small at 2.56% compared to a national average of 18.4%* and a median pay gap among all companies that have reported of 9.9%.

* Based on ONS Annual Survey of Hours and Earnings 2017.

The Group is committed to providing flexible working arrangements for employees and to providing equal access to opportunities for employees, regardless of gender.

Racial and geographical diversity

The Group's employees are from many different backgrounds and are 15 different nationalities: British, American, Indian, Mauritian, Japanese, Portuguese, Vietnamese, Polish, German, Syrian, Irish, Italian, Spanish, Swedish and Cameroonian.

The Board itself comprises three different nationalities, being British, American and Irish.

In addition, Group employees come from a range of business backgrounds, not purely research and development. Indeed, of the Board members, previous roles and responsibilities include those in the supply of chemicals and the engineering, electronics, life sciences, fast-moving consumer goods, publishing and financial industries.

Nanoco has business development people in America, Taiwan, Korea and the UK, also covering Europe and China. Increasingly Nanoco seeks individuals with experience in the business and geographic markets in which the Group operates in order to support its strategic objectives.

Equal opportunities

Nanoco is committed to a policy of treating all its employees and job applicants equally. Nanoco will appoint, train, develop, reward and promote on the basis of merit and ability. Nanoco's equal opportunities policy states that employees will not receive less favourable treatment or consideration on the grounds of age; disability; gender or gender reassignment; marriage and civil partnership status; pregnancy and maternity; race; religion or belief; sex; sexual orientation; or part-time status nor will they be disadvantaged by any conditions of employment that cannot be justified as necessary on operational grounds relevant to the performance of the job.

The Group's equal opportunities policy is reviewed annually and is available to employees on the Group intranet. A copy can be obtained upon request from the Company Secretary.

Disabled employees

It is Nanoco's policy that disabled people, including job applicants and employees, should be able to participate in all of Nanoco's activities fully on an equal basis with people who are not disabled.

Nanoco has a disability discrimination policy that states the principles that Nanoco will not, on the grounds of a person's disability, or for a reason relating to a person's disability, treat that person less favourably than it treats, or would treat, others to whom the same reason does not or would not apply, unless genuinely justified.

If any arrangements made by or on behalf of Nanoco, or any physical feature of premises occupied by Nanoco, put disabled people at a substantial disadvantage compared to people who are not disabled, Nanoco will take such reasonably practicable steps as it can to prevent this disadvantage.

Nanoco is particularly concerned that disabled workers are treated equally in the following areas:

- recruitment and selection;
- promotion, transfer and training;
- terms of employment, benefits, facilities and services; and
- dismissals and redundancies.

Employee communication and involvement

Nanoco is committed to a policy of engaging employees in the activities and growth of the Group. Human resources and senior management review communication channels via the use of employee surveys and plan communication activities to ensure employees are fully informed of current business strategy and financial results or corporate news.

Communication channels include all-Group meetings, senior team meetings which then cascade information down, regular team meetings, cross-functional working group meetings and management one-to-one updates with their team members.

Communication media used includes the Group intranet, all-Group email briefings and online meeting software.

Consultations occur to allow employee opinions to be heard when making decisions affecting their interests and all employees can discuss any business or personal concerns with the human resources management team. Nanoco promotes the achievement of a good work-life balance for employees by offering family-friendly policies like flexible working and the operation of a childcare voucher scheme. Nanoco also has procedures for emergency domestic leave. Remuneration is determined on an annual basis by the Remuneration Committee and Executive Directors, as appropriate. The Group attracts and retains employees of high calibre by offering remuneration that is in line with that offered by industry competitors and local practice in the countries in which it operates.

A Group Long-Term Incentive Plan ("LTIP") was launched during 2015 and grants under this scheme were made to all employees in November 2016. Some employees also hold options from the legacy long-term incentive plans which were operational before the main listing. There are a significant number of employee shareholders as a result of the schemes.

WOMEN IN SCIENCE

PROVIDING EQUAL OPPORTUNITIES

Q&A with Section Head of Nano-materials, Ombretta Masala, PhD, CSci, CChem, FRSC

Why did you join Nanoco?

After working for a large corporate for two years, I joined Nanoco because I wanted to work for a small start-up company where I would have the chance to develop my skill set, be part of a close-knit team that shared the same goals and where founders and employees work together to drive progress and innovation.

What is it like to work for Nanoco?

My work at Nanoco has often expanded outside my job description, so opportunities for learning and growth flourished. Due to the smaller workforce, employees often end up taking on a variety of responsibilities and have the chance of growing their skill set.

I have worked on various projects which have given me the opportunity to work with different people and learn how to build better professional relationships and also to expand my chemistry knowledge.

How is diversity in the Company?

Nanoco has a workforce comprised of people with different backgrounds, experiences and skills which means that these teams generate different ideas that are innovative and creative.

Nanoco has a varied workforce which comprises people of different nationalities and a good fraction of their employees are women.

SUSTAINABILITY CONTINUED

Employee wellbeing

Nanoco recognises that it has a duty to ensure the health, safety and welfare of its employees as far as reasonably practicable. This includes physical, mental and social wellbeing. It is also required to have in place measures to mitigate as far as practicable factors that could harm employees' physical and mental wellbeing, which includes work related stress.

Nanoco introduced an employee wellbeing policy and employee assistance programme in May 2017. The wellbeing policy extends our employer's duty of care by taking action to reduce stressors that are under our control associated with the way work is organised at Nanoco.

The employee assistance programme offers support to help people cope and build resilience. Telephone counselling (UK-based) and face-to-face counselling are available to all employees through the programme.

"Feel better, work better, live better"

The wellbeing policy aims to enhance organisational performance by engaging all employees at all levels:

- to take responsibility for creating a working environment where potential work related stressors as far as practicable are avoided, minimised or mitigated; and
- to take responsibility for their own work and effectiveness and their own health and wellbeing.

It is managed by HR in conjunction with EHS and assesses Nanoco's working practices against the HSE management standards.

The employee assistance programme as part of the wellbeing policy provides counselling support that helps to reduce absence and improve wellbeing by addressing issues head on and reducing their impact.

Risk assessment

Nanoco's performance on wellbeing and stress management is assessed in the context of the HSE management standards.

This involves HR and EHS developing an institution-level risk assessment via employee survey, management focus groups and HSE assessment tools. Results of the recent survey are set out on page 33.

Communication

HR to communicate/provide training on agreed good management practice (knowledge, skills and behaviours framework).

HR to facilitate consultation with employees on the wellbeing policy via surveys and EHS meetings and feature wellbeing topics in employee communications.

HR will publish the policy on its central electronic document management system and in the employee handbook.

Monitoring and review

HR will collate management information which will enable Nanoco to measure its performance in relation to stress management and employee wellbeing.

The wellbeing policy will be reviewed every three years by HR and EHS using management information, staff survey feedback, SMT and EHS Committee feedback and results of risk assessments.

The three-year review will be reported to the Nanoco Board EHS Committee to approve any revisions or amendments to the policy.

Ethics

Nanoco aims to demonstrate and promote high standards of honest and ethical conduct throughout the Group. Formal policies and procedures are reviewed annually and the policies listed below are available on the Group intranet or upon request from the Company Secretary. All Group employees are required to adhere to specified codes of conduct, policies and procedures, including, but not limited to the:

- anti-bribery and corruption policy;
- whistleblowing policy; and
- equal opportunities policy.

Nanoco is a member of the Chemical Industries Association ("CIA") and applies the principles of Responsible Care® to all of its operations.

The community

Whilst the Group does not believe that it has a mandate from shareholders for the Group to make charitable donations, it does encourage its employees to support charitable causes of their choosing.

Nanoco employees hold regular charity fundraising events for their chosen charities throughout the year.

On behalf of the Board

Dr Christopher Richards
Chairman

Dr Michael Edelman
Chief Executive Officer
16 October 2018

Strategic report approval

The Strategic report on pages 2 to 32 incorporates:

- Chairman's statement
- Our business model and strategy
- Our markets
- Chief Executive Officer's statement
- KPIs
- Financial review
- Corporate social responsibility
- Risks, which includes the viability and going concern statements

Dr Michael Edelman
Chief Executive Officer
16 October 2018

OUR EMPLOYEES

WELLBEING SURVEY RESULTS

Background

The HSE Management Standards are aspirational and define a desirable set of conditions for organisations to work towards. They represent targets for an organisation, goals that employers should be working towards in an ongoing process of risk assessment and continuous improvement.

Nanoco's wellbeing survey used the questions from the HSE Management Standards indicator tool and five additional questions around management behaviour and culture sourced from CIPD @employee Outlook' surveys.

The HSE Management Standards indicator tool includes 35 questions that ask about the six stressors of the Management Standards. The HSE Management Standards analysis tool then uses numerical data created from the answers and produces an average figure for each of the six Management Standards for an organisation's workforce.

Nanoco's results from the 2018 wellbeing survey are summarised below.

These results give a broad indicator of the situation in Nanoco as a whole. The aspirational goal of the Management Standards would be to have everything scoring five so where there are lower results, there are areas that would merit some focus on how to improve the way the organisation is performing in those areas. The overall results are reasonably positive with all results being above three and mostly closer to four.

These results have provided a starting point to work from in managing potential sources of work related stress within Nanoco and they will be used as a development tool for the future of the organisation.

The survey results indicate that Nanoco has a number of areas that would merit attention around demands, control, manager support and change.

The results will be reported to the Board and analysis of the specific areas of each standard that require attention is underway and will help form an action plan to be determined by HR and QA/EHS that will then be consulted on with the Staff Health & Safety Committee via the monthly EHS meetings before any specific actions are implemented.

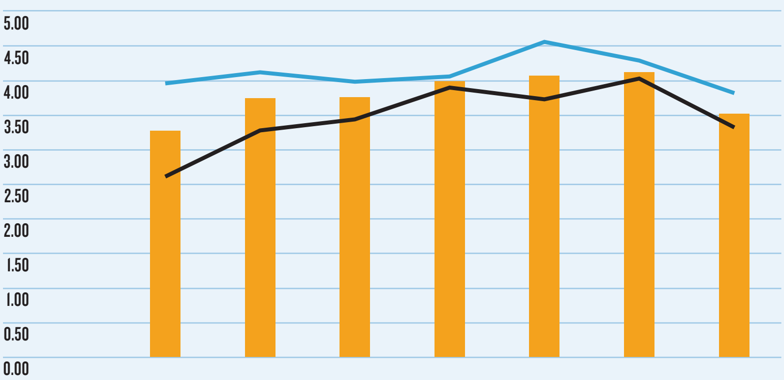
Nanoco remains committed to promoting employee wellbeing as far as reasonably practicable. Nanoco's Board and senior management team are committed to fostering a culture of co-operation, trust and mutual respect, where all individuals are treated with dignity, and can work at their optimum level.

HR will continue to administer the wellbeing survey annually and the resulting action plans will also be reviewed annually to assess progress.

"NANOCO REMAINS COMMITTED TO PROMOTING EMPLOYEE WELLBEING AS FAR AS REASONABLY PRACTICABLE."

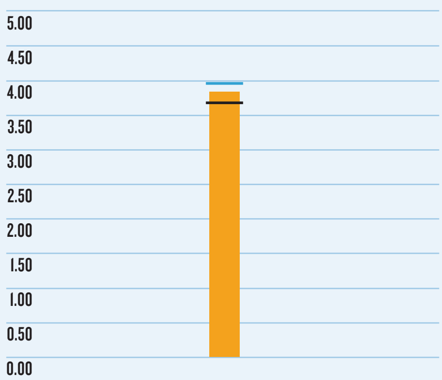
AVERAGE RESULTS

HSE Management Standards



	Demands	Control	Managers' support	Peer support	Relationships	Role	Change
Overall	3.27	3.74	3.75	4.00	4.06	4.11	3.51
Max	3.95	4.11	3.98	4.05	4.55	4.28	3.81
Min	2.60	3.27	3.43	3.89	3.72	4.02	3.32

Nanoco Qs (sourced from CIPD Employee Outlook surveys)



	Mgmt behaviour and culture
Overall	3.83
Max	3.95
Min	3.67

BOARD OF DIRECTORS

AN EXPERIENCED TEAM

DR CHRISTOPHER RICHARDS
Non-executive Chairman

N

Appointed
Chris was appointed Chairman of Nanoco Group plc in May 2016, having joined the Board as a Non-executive Director in November 2015.

Skills and experience
Following a successful international career in the agrochemical and life sciences industries, Chris has become a highly experienced non-executive director and business adviser. Chris is the former Chief Executive Officer of Arysta LifeScience, a Japan-based agrochemical business which grew rapidly under his leadership. After stepping down as CEO in 2010, he became Arysta LifeScience's Non-executive Chairman until the sale of the business in 2015 to Platform Specialty Products.

After gaining his DPhil from the University of Oxford in Biological Science, Chris worked as a research scientist for four years. He began his executive career in 1983 in the Plant Protection division at Imperial Chemical Industries plc, which later became Syngenta. For 20 years, he has lived in various countries including Colombia and Japan and led international marketing and commercial functions.

Other roles
Chris currently holds a number of executive and non-executive roles at quoted and private businesses. He is the Interim CEO and Executive Chairman of Plant Health Care plc (AIM: PHC) and a Non-executive Director of Origin Enterprises plc (AIM: OGN).

DR MICHAEL EDELMAN
Chief Executive Officer

Appointed
Nanoco has been led by Michael since September 2004. Michael led the initial fundraising, spun Nanoco out of the University of Manchester, floated the Group on the London Stock Exchange in 2009 and grew Nanoco into the world-leading quantum dot player it is today.

Skills and experience
Prior to Nanoco, Michael held a number of executive roles, including having responsibility for licensing the technology developed by GE/Bayer joint venture Exatec LLP, Vice President and Managing Director at yet2.com, Commercial Director at Colloids Ltd and Business Manager at Brunner Mond & Co Ltd. Michael started his career with ICI and has a PhD in Organometallic Chemistry from the University of Sussex, UK, and an undergraduate degree in Classics and Chemistry from Tufts University, Boston, MA, US.

Other roles
None.

DR NIGEL PICKETT
Chief Technology Officer

Appointed
Nanoco's technology team is led by Nigel, who is a co-founder of Nanoco and inventor of Nanoco's key quantum dot scale-up technology. In 2000 he moved to Manchester, where he co-founded Nanoco Technologies in 2001.

Skills and experience
Nigel has co-authored over 70 academic papers and is an inventor on 150 patents and pending applications. He has a passion and experience in taking research work from the academic bench through to full commercialisation. Nigel graduated from Newcastle University in 1991 and chose to remain at Newcastle to pursue a PhD in the field of Main Group Organometallics and is a Fellow of the Royal Society of Chemistry. After graduation in 1994 he undertook a postdoctoral fellowship at St Andrews University, Scotland, in the field of precursor design for metalorganic vapour phase epitaxy ("MOVPE") growth and synthesis of nanoparticles using chemical vapour deposition ("CVD") techniques. In 1996 he won a Japan Society for the Promotion of Science ("JSPS") fellowship and spent the following year working at Tokyo University of Agriculture and Technology, Japan. In 1998 he became a Research Fellow at Georgia Institute of Technology, US, working on the design and evaluation of precursors used in MOVPE.

Other roles
None.

A Audit Committee
R Remuneration Committee
N Nominations Committee
Chairman

BRIAN TENNER
Chief Operating Officer and Chief Financial Officer

Appointed
Brian joined the Board as Chief Operating Officer and Chief Financial Officer on 20 August 2018.

Skills and experience
Prior to joining Nanoco, Brian held a number of senior finance positions with both publicly listed and private multi-national companies. His roles have typically focused on broad-ranging operational finance with an emphasis on leading change and transformation programmes. Brian's previous roles include Interim CEO and subsequently CFO of NCC from 2017 to 2018 (cyber security professional services) and CFO of Renold plc (engineering manufacturing) from 2010 to 2016, Scapa plc (speciality chemicals) from 2007 to 2010 and British Nuclear Group (hi-tech chemicals and large-scale decommissioning projects) from 2003 to 2007. Brian qualified as a Chartered Accountant with PwC in 1994 and holds a Law degree (LLB Hons) from Edinburgh University.

Brian also serves as the Company Secretary.

Other roles
Brian is currently a Non-executive Director of Velocity Composites plc, a leading supplier of advanced composite material kits to the global aerospace industry, listed on AIM in London. Brian serves as the chair of the audit committee at Velocity.

DR ALISON FIELDING
Non-executive Director

A N R

Appointed
Alison joined Nanoco in April 2017.

Skills and experience
Alison holds an MBA from Manchester Business School, a PhD in Organic Chemistry and a first-class degree in Chemistry from the University of Glasgow and an MSc in Mindfulness from the University of Aberdeen.

Alison started her career at Zeneca PLC (now Astra Zeneca) followed by five years at McKinsey & Company and later co-founded Techtran Group Limited, which was acquired by IP Group in 2005, where she held the role of Director and COO until 2013. Whilst at IP Group, she also sat on the board of and advised several early-stage and quoted IP Group-backed technology companies.

Other roles
Alison is Venture Partner at IP Group and is also currently a Non-executive Director of Getech Group plc.

BRENDAN CUMMINS
Non-executive Senior Independent Director

A N R

Appointed
Brendan was appointed to the Board on 28 May 2015.

Skills and experience
Brendan is an experienced chemical industry executive with 40 years of industry and leadership experience. Formerly, he was Chief Executive Officer of Ciba Inc., the major international chemicals company acquired by BASF in 2009. During his executive career he worked for many years at the Ciba-Geigy Group and then at Ciba Inc., which was formed in 1998 when Ciba-Geigy separated its chemical and pharmaceutical interests. He joined Ciba-Geigy in Ireland in the early 1970s and went on to hold many senior international positions in locations including Switzerland, China, Hong Kong and Singapore.

Other roles
Brendan is currently a Non-executive Director of Ashland Inc., a global speciality chemical company, quoted on the New York Stock Exchange, where he is also a member of the Ashland audit committee and chair of the governance and nominations committee. In addition, Brendan serves as a non-executive board member of The Perstorp Group, Sweden, and member of the remuneration committee (Perstorp Group is controlled by the French private equity fund PAI Partners). Brendan is a member of the Remuneration, Audit and Nominations Committees.

Please note that all of the Directors who held office during the financial year and at the date of this report are listed above. In addition, Keith Wiggins and David Blain resigned from the Board on 11 June 2018 and 20 August 2018 respectively. Keith was Chief Operating Officer and David was Chief Financial Officer and Company Secretary.

CORPORATE GOVERNANCE STATEMENT

GOOD GOVERNANCE

The Board believes that good governance is fundamental to the successful growth of our business.

The UK Corporate Governance Code embodies core principles of accountability, transparency, probity and a focus on long-term success. The Board firmly believes that a company governed in accordance with these principles will be a successful and well-managed business.

I am pleased to present the Corporate governance report for the year ended 31 July 2018.

As I said in my letter to shareholders in last year's report, the Board believes that good governance is fundamental to the successful growth of our business. The Board and its Committees play a central role in the Group's governance by providing an external and independent perspective on matters material to Nanoco's stakeholders, and by seeking to ensure that effective internal controls and risk management measures are in place.

The Board also promotes a culture of good governance throughout the Group by creating an environment of openness, transparency, accountability and responsibility.

This section of the Annual Report describes our corporate governance structures and processes and how they have been applied throughout the year ended 31 July 2018.

My role as Chairman

My role is to ensure that Nanoco has an effective Board which is collectively responsible for the long-term success of the Group. One of my most important jobs is to ensure that the Board and its Committees have the right balance of skills, experience and knowledge suitable for Nanoco's evolving strategy and growth aspirations as we progress through a new phase of our development.

Board and Committee evaluation

Regular and appropriate Board and Committee evaluation is vital to improving Board effectiveness. This year I conducted a thorough internal Board evaluation process, which was discussed in detail by the Board. Overall, it was concluded that the Board and Committees functioned effectively, with Directors feeling free to voice their differing opinions. In addition, the review identified areas of potential improvement to further enhance the Board's performance.

It was felt that the balance of time allocated to strategy, operations and functional areas and governance was broadly correct. However, Board members would like to have additional time devoted to the development of operational strategy and its implementation.

We are addressing the strategy by allocating additional time outside of the regular Board meetings to ensure that this area is properly addressed in future.

Each of the Audit Committee, Remuneration Committee and Nominations Committee carried out an internal self-evaluation on its effectiveness during the year. The conclusion from the Committee reviews is that, overall, the Committees are working well.

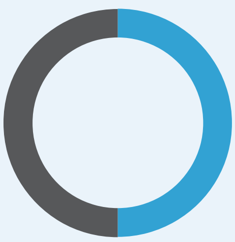
The roles and responsibilities of each Committee, as well as the work carried out in the current year, are set out in the various reports by the Committee Chairs.

Longer-term viability statement

The Group utilised the forecast for the next two years to assess its long-term viability. The two-year period was chosen due to the inherent difficulty and uncertainties in preparing forecasts for the Group at its current stage of development. Further details are provided on page 22.

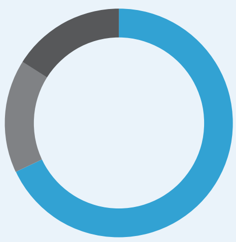
Dr Christopher Richards
Chairman
16 October 2018

BOARD COMPOSITION



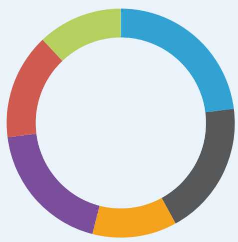
Executive Directors (3)
Non-executive Directors (3)

TENURE



0–5 years (4)
11–15 years (1)
16–20 years (1)

SECTOR EXPERIENCE



Strategy development (6)
Chemical (5)
Human resources (3)
Corporate governance (5)
Financial management (4)
M&A (3)

This section contains the Group's reporting disclosures on corporate governance required by the Companies Act 2006, the 2016 UK Corporate Governance Code of the Financial Reporting Council (the "Code") and the UKLA's Disclosure and Transparency Rule 7 including the required statement of compliance. A copy of the Code is publicly available at www.frc.org.uk/directors/corporate-governance-and-stewardship/uk-corporate-governance-code.

The Board is committed to ensuring that high standards of corporate governance appropriate for the Group's size are maintained by Nanoco.

Statement of compliance with the Code

I am pleased to confirm that the Board considers that it has been in compliance with the Code throughout the year ended 31 July 2018 in all material areas.

We did not comply with the requirement in E.2.4 to give 14 clear working days' notice of the general meeting we held on 14 November 2017. The reason for the non-compliance was the desire to conclude the meeting as early as possible as completion of the equity fundraising that was approved in the general meeting had a direct impact on the publication of the Group's preliminary results for the year ended 31 July 2017 in so far as the proceeds of the fundraising were relevant in assessing the going concern status of the Group. The preliminary results had to be announced by 30 November 2017 and hence it was not deemed possible to give the full 14 clear working days' notice of the meeting.

Whilst in compliance with the Code, we believe that the ratio of Non-executive Directors to Executive Directors is not ideal in that the number of Non-executive Directors matches the number of Executive Directors. As at 31 July 2018, as permitted by the Code due to the size of the Group, the Board comprised the Non-executive Chairman, two independent Non-executive Directors and three Executive Directors. The Board considers that the size and composition of the Board is appropriate for the Group's current stage of development and it has sufficient depth and breadth of experience amongst its current Board members.

Disclosure and Transparency Rule 7

This statement complies with sub-sections 2.1, 2.2(i), 2.3(i), 2.5, 2.7 and 2.10 of Rule 7 of the UK Listing Authority Disclosure Rules. The information required to be disclosed by sub-section 2.6 of Rule 7 is shown in the Statement of Directors' responsibilities on page 71 and is incorporated in this section by reference.

The Board

The Group is controlled through its Board of Directors. The Board's main roles are to provide overall strategy and direction for the Group and to ensure that the necessary financial and other resources are made available to enable those objectives to be met, and that the Group operates at all times within an appropriate corporate governance framework. It has a schedule of matters reserved for its approval, including, but not limited to, decisions on strategy and risk management, approval of budgets, acquisitions and disposals, major capital expenditure, legal and insurance issues, Board structure and the appointment of advisers. In some areas responsibility is delegated to Committees of the Board within clearly defined terms of reference.

Once the strategic and financial objectives of the Group have been set by the Board it is the role of the Chief Executive Officer to ensure that through the day-to-day management of the Group's business they are achieved.

All Directors are subject to election by the shareholders at the next general meeting following appointment to the Board and, in accordance with best practice, have agreed to annual re-election thereafter.

The names of the current Directors together with their biographical details and any other directorships are set out on pages 34 and 35.

The contracts of the Non-executive Directors are available for inspection by shareholders at the AGM.

The Board considers its independent Non-executive Directors to be independent in character and judgement. No Non-executive Director has been an employee of the Group; has had a material business relationship with the Group; receives remuneration other than a Director's fee; has close family ties with any of the Group's advisers, Directors or senior employees; or holds cross-directorships.

The Non-executive Directors constructively challenge and help develop proposals on strategy and bring strong, independent judgement, knowledge and experience to the Board's deliberations.

The Directors are given access to independent professional advice at the Group's expense when the Directors deem it is necessary in order for them to carry out their responsibilities.

The Board meets at least eight times a year and the Audit, Remuneration and Nominations Committees meet at least twice a year. The Non-executive Directors met six times during the year without any Executive Directors present.

The Board receives appropriate and timely information prior to each meeting, with a formal agenda and Board and Committee papers being distributed several days before meetings take place. Any Director may challenge Group proposals, and decisions are taken democratically after discussion.

	Full Board	Audit Committee	Nominations Committee	Remuneration Committee
Number of meetings in period	12	4	4	7
Attendance:				
Executive Directors				
Dr Michael Edelman		–	–	–
Dr Nigel Pickett		–	–	–
David Blain		–	–	–
Non-executive Directors				
Dr Christopher Richards		–		–
Brendan Cummins				
Dr Alison Fielding				
Former Directors				
Keith Wiggins*		–	–	–

* Eligible to attend eleven of the twelve meetings held.

The Board continued

Any Director who feels that any concern remains unresolved after discussion may ask for that concern to be noted in the minutes of the meeting. Any specific actions arising from such meetings are agreed by the Board and then followed up by management.

The Group maintains, for its Directors and officers, liability insurance for any claims against them in that capacity.

There is a formal, rigorous and transparent procedure for the appointment of new Directors to the Board, which is led by the Nominations Committee.

The Group's approach to the management of risk and the principal risks faced by the Group and their mitigating controls are set out on pages 18 to 21.

The Group has effective procedures in place to deal with conflicts of interest. The Board is aware of the other commitments of its Directors and changes to these commitments are reported to the Board. The Companies Act 2006 requires Directors to avoid situations where they have, or could have, a direct or indirect interest that conflicts or potentially conflicts with the interests of the Group. Directors are required to declare in advance of a Board meeting whether any of the business to be discussed in that meeting gives rise to a conflict or potential conflict. That Director will then be excluded from the relevant discussions unless agreed otherwise by the Directors of the Group in the limited circumstance specified in the Articles of Association. They will not be counted in the quorum or permitted to vote on any issue in which they have an interest.

The number of Board and Committee meetings attended by each of the Directors during the year is shown on page 37.

During the year, the Board has maintained responsibility for:

- the overall management of the Group, which included review and development of the Group's focus and business partnerships;
- approval of the annual operating and capital expenditure budgets and any material changes to them; and
- approval of the half-yearly report, interim management statements or trading updates, the preliminary announcement of results and the Annual Report and Accounts.

Each full Board meeting considers, as a matter of course, the operational, technological and financial performance of the Group against its strategic goals and annual budget; reports from the Chairs of the Audit, Remuneration and Nominations Committees (if applicable); important forthcoming events; and reports on investor relations, legal affairs and environment, and health and safety. Certain key senior management members are invited to give presentations at Board and Committee meetings where appropriate.

Other areas, including the review of the Group risk register, the strategic plan, litigation matters, contentious matters, succession planning, IT strategy and the need for a quality and compliance committee and strategic advisory committee are reviewed by the Board during each year at intervals commensurate with their importance.

The roles of the Chairman and Chief Executive Officer

The division of responsibilities between the Chairman of the Board, the Chief Executive Officer and the other Directors are clearly defined. These are summarised in the table on page 41.

Commitments and performance of the Chairman

The Chairman has sufficient time to devote to his duties as Chairman and this has been demonstrated by his active participation in the Group's activities. His performance is reviewed annually by the Non-executive Directors and led by the Senior Non-executive Director, Brendan Cummins.

Professional development

On appointment, each Director takes part in an induction programme in which they receive comprehensive information about the Group; the role of the Board and the matters reserved for its decision; the terms of reference and membership of the Board and Committees and the powers delegated to those Committees; the Group's corporate governance practices and procedures, including the powers reserved to the Group's most senior Executives; and the Group's latest financial information. Throughout their period in office the Directors are updated on the Group's business, the competitive environment in which it operates, corporate social responsibility matters and other changes affecting the Group and the industry it operates in as a whole.

The Group acknowledges the importance of developing the skills of the Directors to run an effective Board. To assist in this, Directors are given the opportunity to attend relevant courses and seminars to acquire additional skills and experience to enhance their contribution to the ongoing progress of the Group. All of the Directors are given briefings on trends and developments in corporate governance.

Performance evaluation

The Board has established a formal process for the annual evaluation of the performance of the Executive Directors. This evaluation is based on a performance evaluation questionnaire completed by each Executive Director. The evaluation of the Chief Executive Officer is performed by the Chairman and the evaluation of the other Executive Directors is performed by the Chief Executive Officer.

Information

Board reports and papers are circulated to the Directors in advance of the relevant Board or Committee meeting. The Board papers include management accounts, regular management reports and information which enable the Board to scrutinise the Group's and management's performance against agreed objectives.

These papers are supplemented by information specifically requested by the Directors from time to time. Minutes of Board and Committee meetings are circulated to all Board members.

Director dealings in the Group's shares

In addition, the Group has adopted a model code for Directors' dealings in securities of the Group which is appropriate for a company quoted on the premium list of the London Stock Exchange. The Directors comply with the rules relating to Directors' dealings and also take all reasonable steps to ensure compliance by the Group's "applicable employees" as defined in the rules.

Investor relations

Meetings with analysts and institutional shareholders are held following the interim and preliminary results announcements and on an ad hoc basis. These are usually attended by the Chief Executive Officer and Chief Financial Officer. Feedback from these meetings and regular market updates are prepared by the Group's broker and by the Group's internal and external investor relations advisers and are presented to the Board. The Chairman and other Non-executive Directors are available to shareholders to discuss strategy and governance issues at a shareholder's request. There is an investors section on the Group's website, www.nanocotechnologies.com, which is kept up to date.

Investor relations continued

During the financial year the Directors held a number of meetings with shareholders as set out in the table below.

Investor meetings	
One-to-one meetings	31
Conference calls	21
Group meetings	2

The Directors aim to ensure that a healthy and active dialogue is maintained with the Group's shareholders. The Group takes care to ensure that one-to-one meetings with shareholders or potential investors are structured around information that is already available to all shareholders on an equal footing. The Group also endeavours to ensure that all published information is capable of being readily understood on a stand-alone basis without the need for a one-to-one meeting. This is an extension of the "fair, balanced, and understandable" requirement inherent in the Annual Report and Accounts.

Annual General Meeting ("AGM")

At the AGM, separate resolutions will be proposed for each substantially different issue. The outcome of the voting on AGM resolutions is disclosed by means of an announcement on the London Stock Exchange.

Relations with shareholders and other stakeholders

Nanoco recognises the importance of good and timely communication. Its primary communication channel is the internet. All press releases are published on the Company's website shortly after they are issued via the regulatory news service in the United Kingdom.

The majority of shareholders receive most of their information about the Group, including the annual and half-yearly reports, via the website.

All shareholders are encouraged to attend the Annual General Meeting and talk to the Directors there. The Chairs of the Audit, Remuneration and Nomination Committees are available at the meeting to answer questions. All Directors attend the AGM. In addition, shareholders are able to contact the Group via email at info@nanocotechnologies.com.

The table below shows the different resolutions proposed at the 2017 AGM, the proportions of possible votes that were cast and the proportions in favour and against each resolution (resolutions 1 to 8 were passed as ordinary resolutions and resolutions 9 to 11 were passed as special resolutions).

The Board takes steps to ensure that the views of major shareholders are considered through regular contact. As appropriate, the Board takes due note of their views insofar as these are relevant to the Group's overall approach to corporate governance. This is achieved through feedback from meetings with significant shareholders and feedback from the Group's brokers. Significant shareholders were consulted regarding the changes to the remuneration policy which will be proposed at the 2018 AGM.

	For			Against			Withheld	
Resolution number	Votes	% of total votes cast	% of total voting rights excluding treasury shares	Votes	% of total votes cast	% of total voting rights excluding treasury shares	Number of votes withheld	% of total voting rights excluding treasury shares
1 To receive the Report and Accounts	133,574,692	100.0%	46.7%	10,160	–	–	5,791,763	2.0%
2 To re-appoint the auditor	139,278,128	100.0%	48.7%	31,443	–	–	67,044	–
3 To authorise the Directors to agree the auditor's fees	139,261,099	100.0%	48.7%	6,660	–	–	108,856	–
4 To elect Dr Alison Fielding	139,311,694	100.0%	48.7%	8,922	–	–	55,999	–
5 To re-elect Dr Michael Edelman as a Director	138,240,285	99.2%	48.3%	1,053,712	0.8%	0.4%	82,618	–
6 To approve the Directors' remuneration report (excluding the remuneration policy)	139,153,030	99.9%	48.7%	84,967	0.1%	–	138,618	–
7 Approval for political donations	136,469,436	97.9%	47.7%	2,875,879	2.1%	1.0%	31,300	–
8 Authority to allot shares	135,301,051	97.1%	47.3%	3,983,445	2.9%	1.4%	92,119	–
9 Disapplication of pre-emption rights	134,768,472	96.8%	47.1%	4,478,691	3.2%	1.6%	129,452	–
10 To authorise the Company to purchase its own shares	139,117,555	99.8%	48.7%	253,560	0.2%	0.1%	5,500	–
11 To approve reduced notice of general meetings (other than Annual General Meetings)	135,100,205	97.0%	47.2%	4,214,110	3.2%	1.5%	62,300	–

CORPORATE GOVERNANCE STATEMENT CONTINUED

Shareholder analysis

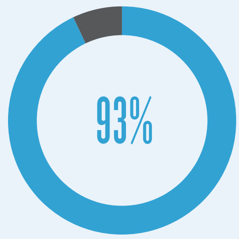
Shareholders at 31 July 2018 are analysed as follows:

	Shares	% IC
UK	265,853,600	92.97
Europe (ex UK)	5,492,551	1.92
North America	8,456,601	2.96
Asia	–	–
Rest of World	3,412,500	1.19
Unidentified holdings	111,098	0.04
Unanalysed (holdings below threshold)	2,620,799	0.92
Total	**285,947,149**	**100.00**

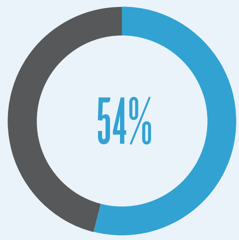
	Shares	% IC
Domestic institutions	155,534,639	54.39
Hedge funds	58,541,426	20.47
Private stakeholders/investors	21,623,883	7.56
Domestic brokers	19,345,681	6.77
Employees, etc.	18,789,786	6.57
Corporate stakeholders	8,953,503	3.13
Foreign brokers	7,691,343	2.69
Foreign institutions	4,129,143	1.44
Unanalysed (holdings below threshold)	(8,773,353)	(3.07)
Unidentified holdings	111,098	0.04
Total	**285,947,149**	**100.00**

	Shares	% IC
GARP	18,759,898	6.56
Growth	16,261,517	5.69
Hedge	58,330,926	20.40
Index	12,033,907	4.21
Multi-style	28,663,829	10.02
Private client brokers ("PCB")	82,693,050	28.92
Value	136,000	0.05
Unidentified holdings	111,098	0.04
Unanalysed (holdings below threshold)	(8,773,353)	(3.07)
Non-institutional holdings	77,730,277	27.18
Total	**285,947,149**	**100.00**

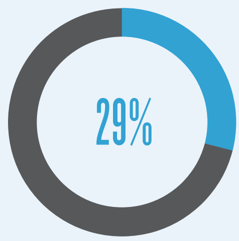
Note: non-institutional holdings include identified retail, brokers and corporate stakeholders.



UK shares



Domestic institutions' shares



Private client brokers' ("PCB") shares

Governance framework

The different parts of the Company's governance framework are shown below, with a description of how they operate and the linkages between them.

BOARD

The Board provides leadership and is responsible for the overall management of Nanoco, its strategy, long-term objectives and risk management.

It ensures the right Company structure is in place to deliver long-term value to shareholders and other stakeholders.

For further details of the role of the Board see page 36

BOARD COMMITTEES

Support the Board in its work with specific areas of review and oversight objectives and risk management. They ensure the right Company structure is in place to delivery long-term value to shareholders and other stakeholders.

AUDIT COMMITTEE

Primary function is to assist the Board in fulfilling its financial and risk responsibilities. It also reviews financial reporting and the internal controls in place and the external audit process.

For further information see pages 45–48

NOMINATIONS COMMITTEE

Responsible for considering the Board's structure, size, composition and succession planning.

For further information see pages 43–44

REMUNERATION COMMITTEE

Responsible for determining the overall remuneration of the Executive Directors and the remuneration of senior managers within the broader institutional context of remuneration practice.

For further information see pages 49–67

CHIEF EXECUTIVE

Has responsibility for managing the business and overseeing the implementation of the strategy agreed by the Board.

EXECUTIVE COMMITTEE

The Executive Committee currently comprises the Group's most senior business and operational executives. It is responsible for assisting the Chief Executive in the performance of its duties including:

- developing the annual operating plan;
- monitoring the performance of the different divisions of the Company against the plan;
- carrying out a formal risk review process;
- reviewing the Company's policies and procedures;
- prioritisation and allocation of resources; and
- overseeing the day-to-day running of the Company.

CORPORATE GOVERNANCE STATEMENT CONTINUED

Board composition and division of responsibilities

Role profiles are in place for the Chairman and Chief Executive Officer, which clearly set out the duties of each role.

Role	Responsibilities
Chairman of the Board (Dr Chris Richards)	Is responsible for the running of the Board and promoting a culture of openness and debate. The Chairman, in conjunction with the CEO and other Board members, plans the agendas, which are issued with the supporting Board papers in advance of the Board meetings. These supporting papers provide appropriate information to enable the Board to discharge its duties which include monitoring, assessing and challenging the executive management of the Group.
Chief Executive Officer (Dr Michael Edelman)	Together with the senior management team, is responsible for the day-to-day running of the Group and regularly provides performance reports to the Board. The role of CEO is separate from that of the Chairman to ensure that no one individual has unfettered powers of decision.
Chief Operating Officer and Chief Financial Officer (Brian Tenner)	Works closely with the CEO and CTO to support them in the delivery of their roles. Key objectives are to ensure the smooth running of all production processes and back office functions. Includes responsibility for all financial matters including costings and plant efficiencies as well as commercial margins. The role has oversight of all reporting and key performance metrics to ensure management and the Board have an accurate, timely and relevant suite of KPIs to give a full balanced scorecard of all aspects of business performance.
Senior Independent Director (Brendan Cummins)	Provides a sounding board for the Chairman and serves as an intermediary for other Directors, employees and shareholders when necessary. The main responsibility is to be available to the shareholders should they have concerns that they have been unable to resolve through normal channels or when such channels would be inappropriate.
Non-executive Director (Dr Alison Fielding)	Maintains an ongoing dialogue with the Executive Directors which includes constructive challenge of performance and the Group's strategy.
Company Secretary (Brian Tenner)	Ensures good information flows within the Board and its Committees and between senior management and Non-executive Directors. The Company Secretary is responsible for facilitating the induction of new Directors and assisting with their professional development as required. All Directors have access to the advice and services of the Company Secretary to enable them to discharge their duties as Directors. The Company Secretary is responsible for ensuring that Board procedures are complied with and for advising the Board through the Chairman on governance matters. The appointment and removal of the Company Secretary is a matter for the Board as a whole.
Chief Technical Officer (Dr Nigel Pickett)	Responsible for all research and development activities of the Group.

Experience of the Board

The members of the Board bring a wide range of skills and experience to the Group. This diverse skill set allows the Board to appropriately challenge and lead the Group's strategy.

The chart below summarises its key areas of significant experience.

Name	Strategy development	Chemical	Human resources	Corporate governance	Financial management	M&A
Dr Christopher Richards	👤	👤	👤	👤	–	👤
Dr Michael Edelman	👤	👤	–	👤	👤	–
Dr Nigel Pickett	👤	👤	👤	–	–	–
Brian Tenner	👤	–	–	👤	👤	👤
Dr Alison Fielding	👤	👤	–	👤	👤	–
Brendan Cummins	👤	👤	👤	👤	👤	👤

Dr Christopher Richards
Chairman
16 October 2018

NOMINATIONS COMMITTEE REPORT

CHANGE MANAGEMENT

Good governance and strong, responsible, balanced leadership are critical to creating long-term shareholder value.

MEMBERS

Dr Christopher Richards (Chairman)

Brendan Cummins

Dr Alison Fielding

The Board strongly believes that good governance and strong, responsible, balanced leadership are critical to creating long-term shareholder value and business success. The Committee met four times during the year.

Roles and responsibilities

The Nominations Committee will meet not less than twice a year to assist the Board in discharging its responsibilities relating to the composition and make-up of the Board and any Committees of the Board. It is also responsible for periodically reviewing the Board's structure and identifying potential candidates to be appointed as Directors or Committee members as the need may arise. The Nominations Committee is responsible for evaluating the balance of skills, knowledge and experience and the size, structure and composition of the Board and Committees of the Board, and retirements and appointments of additional and replacement Directors and Committee members, and makes appropriate recommendations to the Board on such matters.

The Board decided to extend the responsibilities of the Committee to include governance. The Committee's terms of reference have been amended to include:

The Committee shall:

a) on at least an annual basis review and consider the Company's compliance with recommended corporate governance practices and shall in particular review the Company's procedures and controls for ensuring compliance with:

   i) the UK Corporate Governance Code, the FCA Disclosure Guidance and Transparency Rules, the Market Abuse Regulation, the London Stock Exchange Admission and Disclosure Standards, the Listing Rules, the Prospectus Rules and any other rules and regulations with which the Company is required to comply (together the "Corporate Governance Requirements"); and

   ii) the timely and accurate disclosure of all information that is required to be disclosed in order to satisfy the Company's legal and regulatory obligations under the Corporate Governance Requirements,

   and recommend any proposed changes to the Board;

b) oversee compliance with the Corporate Governance Requirements and report on such compliance to the Board;

c) review and consider any proposal waivers of the Corporate Governance Requirements and make a recommendation to the Board with respect to such request for a waiver;

d) review potential conflicts of interest involving Directors and shall determine whether such Director or Directors may vote on any issue as to which there may be a conflict; and

e) review all related party transactions and determine whether such transactions are appropriate for the Company to undertake and advise the Board accordingly.

Committee membership

In accordance with the UK Corporate Governance Code the Nominations Committee consists of Non-executive Directors. It has been chaired by Dr Christopher Richards since his appointment as a Non-executive Director in November 2015 and he continues this role having been made Chairman of the Board in May 2016. The Board considers it appropriate for Dr Christopher Richards to chair the Nominations Committee in order to achieve a balance with the Audit and Remuneration Committees. The Committee's other members are Brendan Cummins and Dr Alison Fielding. There have not been any changes to the Committee membership during the year.

Committee activities during the year

The Nominations Committee met four times during the financial year to discuss Board structure, its independence and its skillset. In addition the Committee discussed at some length with the Chief Executive the size and shape of the Executive team that would best serve the needs of the business going forward.

The Nominations Committee considered the overall dynamics and performance of the executive management team and how best to provide effective and cost-efficient leadership to achieve the strategic objectives of the Group while maintaining a strong focus on business development activities. Following the resignation of Keith Wiggins, the former COO, the Committee concluded that an individual with a finance background but also with a strong grounding in operational management would be the right match for the CEO and CTO.

The Committee decided therefore to create a new combined role of Chief Operating Officer and Chief Financial Officer to be based in the Group's UK operations and an appropriate job specification was then created.

NOMINATIONS COMMITTEE REPORT CONTINUED

Committee activities during the year continued

To meet the requirements for a locally based senior executive, the Committee drew on the networks of various Board members to identify potential candidates for the role. The Committee also reviewed potential candidates who had previously met with the Group. That process identified Brian Tenner as the lead candidate for this new role. The resignation of David Blain was accepted and the appointment of Brian Tenner was confirmed.

Brian Tenner has significant experience of performing operational finance roles in a number of diverse industries. He also brings broad experience of leading businesses through transformation and change at critical points in a business lifecycle. The Committee therefore considers his skills and experience to be an excellent match for the needs of Nanoco today.

With the creation of the combined COO and CFO role, the Board considers that the size and composition of the Board is appropriate for the Group's current stage of development and it has sufficient depth and breadth of experience amongst its current Board members.

Diversity

The Group pursues diversity, including gender diversity, throughout the business. When recruiting at Board level, the Nominations Committee requires that any executive search firms used by the Group have signed up to its industry's voluntary code of conduct (prepared in response to the Davies Review of Women on Boards). The Group follows a policy of appointing talented people on merit at every level and does not have a specific target for numbers of female Directors. The Board will also ensure that its own development in this area is consistent with its strategic objectives and enhances Board effectiveness.

Review of the Nominations 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, effective and continues to improve.

Dr Christopher Richards
Nominations Committee Chairman
16 October 2018

AUDIT COMMITTEE REPORT

RISK MANAGEMENT

Ensuring the Group's growth and development is matched by appropriate risk management, internal controls and financial reporting.

MEMBERS

Dr Alison Fielding (Chair)

Brendan Cummins

The Audit Committee plays a central role in the review of the Group's financial reporting, internal control and risk management processes. Its aim is to ensure that these processes deliver high quality and timely information.

The Audit Committee monitors internal and external risk factors on behalf of the Board. These are maintained in the Group's risk register. The status and assessment of matters in the risk register also informs the drafting of the Viability statement. As a Committee it seeks not just to respond to external factors but to support and challenge management to anticipate future risks and opportunities.

Roles and responsibilities

The specific duties of the Committee, how it operates and the key areas of focus are set out below (and include recurring areas of focus and also issues specific to a particular reporting period as they arise):

- financial reporting, including reviewing and monitoring the integrity of the Group's annual and interim financial statements;
- ensuring the appropriateness of accounting policies and the critical judgements and estimates used in financial reporting;
- ensuring the Group remains up to date with developments in accounting and reporting requirements;
- advising the Board on whether or not the financial statements, when taken as a whole, are fair, balanced and understandable;
- reviewing and monitoring the performance of the external auditor, the planning and effective execution of the external audit process, controlling the award of non-audit work to the external auditor, and advising the Board on the appointment of the external auditor;
- setting the audit and non-audit fees of the auditor. These are set out in note 6 to the financial statements;
- continual monitoring of the appropriateness and effectiveness of internal controls (including whether an internal audit function is required); and
- the implementation and ongoing review of the Group's risk management processes and systems.

The Audit Committee will give due consideration to laws and regulations, the provisions of the UK Corporate Governance Code and the requirements of the Listing Rules.

Committee membership

The composition of the Committee currently comprises Dr Alison Fielding and Brendan Cummins. In accordance with the provisions of the Code, the Committee is made up of independent Non-executive Directors. The Board considers that Dr Alison Fielding, by virtue of her former executive and current non-executive roles, has recent and relevant financial experience to act as Chair of the Committee. All members of the Committee are considered to have experience and competence relevant to the material science sector.

Summary biographies of all members of the Committee are detailed on pages 34 and 35.

Meeting frequency and attendance

The terms of reference of the Committee require at least four meetings per year. The Committee met four times during the financial year. As well as the members of the Committee, the meetings are usually attended on an invitational basis by the Chairman, the Chief Executive Officer and the Chief Financial Officer. The external auditor also attends each meeting unless the business of the meeting does not need them to be present. The Committee also has meetings with the external auditor without the Executive Directors being present. Attendance of each member is set out above:

Committee member	Meetings/ attended
Dr Alison Fielding (Chair)	4/4
Brendan Cummins	4/4

Activities of the Audit Committee

The Committee discharged its obligations in response to the financial year as follows:

Significant issues considered during the year in respect of the financial statements

The Committee assessed the following matters in respect of financial reporting and in the preparation of the Interim Report and the Annual Report and Accounts:

- Continuing appropriateness of the Group's accounting policies.
- Continuous development in the quality and transparency of the Group's external reporting.
- A review of key judgements and estimates made by management.
- Considering whether or not the financial statements, when taken as a whole, are fair, balanced and understandable meaning that shareholders receive adequate information to assess the Group's strategy, business model and performance.
- The potential impact of the new revenue recognition standard, IFRS 15, which will apply to next year's financial statements but on which the Group is required to give an indication of the impact on the current year's financial statements.

The Committee takes advice from the CFO in forming its assessments.

Activities of the Audit Committee continued

Our approach to materiality

The financial statements must present a true and fair view of the performance and financial position of the Group. They must also present a fair, balanced and understandable view. These are both aimed at ensuring that a user of the accounts can gain an accurate picture of the underlying performance and position of the business. To achieve this all material matters need to be addressed.

The Directors take a range of quantitative and qualitative matters into account in assessing whether or not a matter is deemed to be material. These include the absolute size of a potential adjustment by reference to the overall income statement or the financial position statement but also by reference to an individual component. Qualitative judgements include whether an issue would reverse or materially alter a trend (such as turning a profit into a loss, or growth into a decline).

Significant accounting matters and areas of significant management judgement

The Committee, together with the Board, considered what were the significant accounting matters and areas of management judgement in relation to the financial statements and how these would be addressed. Set out below are the key accounting matters and judgements assessed by the Committee during the year:

- Revenue recognition and deferred income.
- Carrying values of intangible assets.
- Going concern.
- The impact of IFRS 15 Revenue from Contracts with Customers.

Revenue recognition and deferred income (recurring item)

The Committee reviewed the revenue recognition policies and management judgements made in the preparation of the financial statements. Where revenue relates to the sale of products or services to customers, there is little need for judgement or estimates as these types of revenue are recognised either on the transfer of risks and rewards of ownership of goods or on a time and material basis for delivery of services.

The material judgements required under the current accounting policy and financial reporting standard (IAS 18) primarily relate to instances where there is a specific milestone or deliverable which is not certain to be achieved. Hence the material judgement is to assess the likelihood that a specified deliverable or customer milestone will be achieved and the interpretation of the contract with multiple elements to consider.

Where the judgement is that the deliverable will be achieved, a key estimate is then to assess what proportion of the total work required to complete the deliverable has been completed by the end of the financial reporting period. During the year the Group signed a significant agreement with our US Company in which various milestones and deliverables were specified and this was an area where the revenue recognition judgements and estimates were deemed to be a very material proportion of the Group's total revenue in the period.

In addition, the Committee reviewed management's judgement that the transfer of cash from a customer to the Group to be applied to the acquisition of specific assets should be accounted for by Nanoco as deferred revenue and the purchase of assets by the Group. This decision was taken on the basis that the assets are controlled by the Group and the cash transfer was made in exchange for significantly different goods or services (reflecting the guidance in IFRIC 18).

The Committee concluded that the judgements and estimates made by management in respect of revenue recognition and the treatment of deferred income were reasonable and appropriately disclosed in the financial statements.

Carrying value of intangible and tangible assets (recurring item)

The Group holds a number of intangible assets, primarily relating to IP. At the end of the year these had a value of £3.4 million (2017: £2.6 million). Given that the Group is yet to make a profit, management must exercise judgement in assessing whether or not this value can be recovered from the ongoing operation of the business or through disposal. Management performs an annual assessment of whether or not these assets should be impaired.

The Committee challenged and reviewed the results of the assessment carried out by management. The Committee agreed with management that no impairment of these assets was required in the current year.

Going concern (recurring item)

The Committee considered the use of the going concern basis for preparing the financial statements. This is currently an annual recurring activity given the ongoing losses incurred by the business in advance of generating full-scale production levels of commercial revenues.

The review by management takes into account existing available cash resources, run rates on operating costs and cash burn, as well as probability weighted assessments of potential income streams.

The Group's base case forecasts (which are approved by the Board) are then subject to downside scenario modelling and sensitivity analysis. This includes identifying different management action plans in response to a downside scenario crystallising. The analysis is performed for the twin purposes of preparing the Viability statement and also assessing whether or not the going concern basis for the preparation of the financial statements remains appropriate. The going concern analysis is effectively a subset of the two-year period used for viability analysis.

The assessment by management and the Committee includes reference to the material potential risks identified in the Group's risk register and any mitigating actions and controls as shown on pages 18 to 21.

The Committee concluded that, although there is a material uncertainty around the timing and implementation of cost savings should sales not materialise, it remains appropriate to adopt the going concern basis for the preparation of the financial statements. Given the nature of the risks and the importance of this assessment, the Committee instructed management to ensure that there is an appropriately high level of disclosure of this matter in the financial statements – as set out in the sections on risk, viability and going concern on pages 18 to 23.

The impact of IFRS 15 Revenue from Contracts with Customers (new current year item)

IFRS 15 will be the accounting standard used for revenue recognition policies and judgements in next year's financial statements. During the year management performed an exercise to gain an overview of any potential impact of IFRS 15 on the Group and its business model.

In respect of the sale of goods and services the Group does not consider that there will be any material impact of IFRS 15. The sale of goods will continue to be recognised at the point of transfer of control (usually at the point of dispatch but conditional on actual terms of freight or shipping).

The sale of simple stand-alone services that are delivered over a short time frame will continue to be recognised over the period of time that the service (or "performance obligation" in the terminology of IFRS 15) is delivered. The Group's legal terms of trade establish that the Group will be entitled to recover the value of any service that has been delivered to the customer, even if it is cancelled by the customer before it is complete. This is a similar basis of contracting that is adopted by most service providers.

Activities of the Audit Committee continued

Significant accounting matters and areas of significant management judgement continued

The impact of IFRS 15 Revenue from Contracts with Customers (new current year item) continued

For longer-term services or contracts in which there are multiple deliverables ("performance obligations") the picture will be more complex. The agreement with the US Company is one such example. In each case it will be necessary to identify each deliverable and the associated revenue to be ascribed or specifically attributed to it. Each separate performance obligation will have revenue and costs attributed to it and each may be recognised using different criteria or metrics. The fact that the Group already separates different deliverables into either individual statements of works or milestones means that some of this unbundling of deliverables may already be done. This will potentially reduce the impact of transitioning to the new standard. However it is possible that there may be a delay in revenue recognition following the implementation of IFRS 15 compared to that recognised under IAS 18.

External audit plan

During the year the Committee reviewed and approved the scope and timetable for the interim review and final audit.

Safeguarding auditor independence

The independence of the external auditor is essential to the provision of an objective opinion on the true and fair view presented in the financial statements. The Committee reviews the policies and status of the independence of the external auditor consistent with the ethical standards published by the Auditing Practices Board.

Auditor independence and objectivity is also safeguarded by limiting the nature and value of non-audit services performed by the external auditor (see later section). The Group has a policy of not recruiting senior employees of the external auditor who have worked on the audit in the past two years. The Group works with the external auditor to achieve the rotation of the lead engagement partner at least every five years. The current lead engagement partner has held the position for three years.

The external auditor is also required periodically to assess whether, in its professional opinion, it is independent and those views are shared with the Audit Committee. The Committee has authority to take independent advice as it deems appropriate in order to resolve issues on auditor independence. No such advice has to date been required.

Non-audit services provided by the external auditor

The Audit Committee will only approve the provision of non-audit services by the external auditor where they do not represent a threat (by their nature or scale) to this requirement for independence. The aim is to ensure that no material risk is taken of the auditor both advising on and auditing the same information in the financial statements.

The Audit Committee's approval is required for any fees for non-audit work paid to the auditor in excess of £10,000 in any financial year. However, the Group recognises that it can receive particular benefit from certain non-audit services provided by the external auditor due to its technical skills and detailed understanding of the Group's business and hence some non-audit work is allowed.

The only fees paid for non-audit services during the year related to a review of the interim results and a review of the working capital statement required for the equity fundraising carried out in November 2017. These additional pieces of work are not considered at risk of jeopardising its independence. Separate external firms are engaged for taxation and accounting advice.

Independence assessment by the Audit Committee

The Committee received a formal statement of independence from the external auditor.

For the current year, the Committee has concluded that the external auditor remains independent and objective for the purposes of its role.

However, in view of the period which has elapsed since the appointment of its current auditor in 2008, the Committee has commenced a tender process and this is expected to be completed following the finalisation of this year's audit.

Financial reporting on the basis of fair, balanced and understandable ("FBU")

The Committee reviewed the interim and annual financial statements. As part of that review process, the members of the Committee were provided with a draft of the full Annual Report enabling them to ensure that the numbers therein were consistent with those in the financial statements or were sourced from appropriate data and their knowledge gained from the monthly management accounts.

The Committee also assessed whether the narrative description of the Group's activities and performance was consistent with its own understanding obtained through Board and Audit Committee meetings and other interactions it had with management. Drawing on this knowledge of the Group's activities and its own industry knowledge and experience, supplemented by advice received from external advisers during the drafting process, the Board determined that the Annual Report and Accounts are fair, balanced and understandable.

Internal controls and risk management

The Board has overall responsibility for the Group's system of internal controls, including reviewing the effectiveness of these controls and the processes in place for risk management. The role of the Executive Directors is to implement the Board's policies on risk and control and provide assurance on compliance with these policies. The processes and procedures in place are designed to manage rather than eliminate risk and can therefore only provide a reasonable and not an absolute assurance against material misstatements or losses.

Executive Directors have a close involvement with all day-to-day operations and also meet with staff on a regular basis to identify and review business risks, the controls needed to minimise those risks and the effectiveness of controls in place. Business risks are monitored and updated on a regular basis. Insurance is in place where appropriate. The principal risks faced by the Group are set out on pages 18 to 21.

Some key features of the internal control system are that:

i) annual budgets and rolling forecasts are reviewed and approved by the Board;

ii) monthly management accounts information is compared and reconciled with budgets;

iii) the Group has written operational, accounting and employment policies in place;

iv) the Board actively identifies and evaluates the risks inherent in the business and ensures that appropriate controls and procedures are in place to manage these risks;

v) the Group has well-established financial reporting and approval systems and procedures which cover all key transactional processes and Group commitments; and

vi) the Group has a uniform system of investment appraisal.

Internal controls and risk management continued

The Group has quality assurance processes in place by virtue of its internal quality assurance department, which audits non-financial processes and procedures.

Additional procedures were introduced by the Audit Committee in 2017 to ensure that revenue recognition is correctly determined as part of the process of agreeing new licences and other technical areas of IFRSs are properly applied. These new procedures have operated satisfactorily throughout the year.

The Committee considers that the need for an internal audit function is not currently warranted due to the size and complexity of the business but will reconsider this need not less than annually.

Whistleblowing and confidential reporting procedures

The Group operates a confidential reporting and whistleblowing procedure. The policy aims to support the stewardship of the Group's assets and the integrity of the financial statements as well as protecting staff welfare. The procedure is reviewed annually by the Committee to ensure that it remains fit for purpose.

The Committee did not receive any notifications through the whistleblowing process. The Committee has recommended that staff are reminded of the whistleblowing process as part of ongoing engagement with staff on compliance issues such as anti-bribery training.

Internal accountability

The Board has overall responsibility for the Group's system of risk management and internal control. The Audit Committee reviews the effectiveness of the system at least annually on behalf of the Board and, having carried out this review, the Board continues to believe that the system is effective in safeguarding shareholders' interests and the Group's assets. Such a system can only provide reasonable and not absolute assurance against material misstatement or loss, nor can it eliminate the risk of failure. The Committee notes any control improvement opportunities identified by the external auditor and introduces appropriate changes when considered beneficial to the Group.

Risk management

In accordance with the Internal Control Guidance for Directors issued by the Financial Reporting Council, there is an ongoing process for identifying, evaluating and managing the significant risks faced by the Group. This process was introduced during 2015 and is summarised on pages 18 to 21.

The Group operates, and attaches importance to, clear principles and procedures designed to achieve the accountability and control appropriate to a science-based business operating internationally in the research business sector. Nanoco has established an organisational structure with clearly drawn lines of accountability and delegation of authority.

Financial results and key operational and financial performance indicators are reported regularly throughout the year and variances from plans and budgets are investigated and reported. The Group has a system of high level financial control procedures which are supplemented by detailed procedures at each operating entity. Compliance with these procedures is monitored by the Audit Committee through its reviews of internal and external audit findings, its reviews of exceptions, and regular management and financial reporting.

Details of the technical, product, market and operational risks of the business are disclosed in the Strategic report.

Details of the Group's financial risk management objectives and policies are disclosed in note 26 to the financial statements.

The Directors do not consider that the business is, at this time, significantly exposed to credit or interest risk and, as such, these risks are not considered to be material for an assessment of the assets, liabilities, financial position and results.

The Group seeks to manage liquidity by ensuring funds are available to meet foreseeable needs and to invest cash assets safely and profitably. The Group had cash, cash equivalent and deposit balances of £10.7 million as at 31 July 2018 (2017: £5.7 million). Details of the basis for the Directors adopting the going concern assumption and the material uncertainty are set out on pages 22 and 23.

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.

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

Dr Alison Fielding
Audit Committee Chair
16 October 2018

REMUNERATION COMMITTEE REPORT

LONG-TERM SUCCESS

Statement from the Chairman of the Remuneration Committee.

MEMBERS

Brendan Cummins (Chairman)

Dr Alison Fielding

Dear shareholder

As the Chairman of Nanoco's Remuneration Committee (the "Committee"), I am pleased to present our Directors' remuneration report for the year ended 31 July 2018.

In accordance with the applicable legislation, this report is presented in two parts: (1) the Directors' remuneration policy; and (2) the Annual report on remuneration.

Directors' remuneration policy

Our remuneration policy is designed to promote the long-term success of the business by ensuring a focus on performance related pay that drives our transformation to a commercial proposition and provides a clear emphasis on long-term sustainable performance.

Our Directors' remuneration policy was last approved by shareholders at the 2015 Annual General Meeting, with more than 99% of votes cast in favour of it. That policy was applied during the year ended 31 July 2018, as described in the Annual report on remuneration. In accordance with the applicable legislation, we are seeking shareholder approval for a new Directors' remuneration policy at the 2018 Annual General Meeting. The Remuneration Committee reviewed the policy to ensure that the directors' remuneration arrangements continue to be aligned to the strategic direction of the Group and to our stakeholder philosophy. Following this review, the Remuneration Committee believes that the policy approved in 2015 still provides an appropriate alignment to both the Group's strategy and shareholders and, therefore, only minor changes have been made, which are summarised opposite.

Remuneration element	Changes and rationale
Base salary	No change to the policy approved in 2015 which provides that any increase to an Executive Director's salary will normally be in line with the wider workforce, with discretion to award larger increases in appropriate circumstances. The Executive Directors' salaries were increased by 2.5% with effect from 1 August 2018, same as the increase awarded to the wider workforce. As part of its review of the Executive team's remuneration, the Committee considered the positioning of the salaries based on up to date market data and market comparisons. The analysis indicated that in the case of Dr Nigel Pickett, his base salary was no longer competitive to the market. Accordingly, the Committee agreed an additional increase in his salary, bringing his base salary with effect from 1 August 2018 to £190,000, an overall increase of c. 9%.
Benefits	No change.
Retirement benefits	No change to the policy which permits a maximum contribution of up to 10% of salary to a pension scheme or as a cash supplement, plus the ability for the Executive Director to sacrifice salary into pension and have the employer National Insurance contribution savings contributed to the pension. However, in FY19, as in previous years, the contribution will be capped at 5%, plus any salary sacrifice and associated employer National Insurance contribution saving. The Remuneration Committee has no current intention to increase the amount of pension contribution.
Annual bonus	No change to the maximum opportunity of 100% of salary or to the requirement ordinarily to defer into shares for two years 50% of any bonus earned. The Directors' remuneration policy approved in 2015 provided for up to 60% of the bonus to be subject to a combination of financial and corporate measures, with the balance based on challenging personal objectives. To ensure the performance measures are appropriately focused on the Group's annual strategy and aligned to its KPIs, the new policy will require at least 75% of the bonus to be subject to the achievement of financial and/or corporate measures. Our approach to annual bonuses in respect of FY19 is summarised on page 66.
LTIP	No changes are proposed to the maximum award of 100% of salary (or up to 250% of salary in exceptional circumstances). Flexibility has been introduced to enable the performance measures to be based on the achievement of strategic milestones; the Remuneration Committee will only use strategic milestones as a performance measure if it considers that appropriately robust targets can be set. Our approach to LTIP awards in respect of FY19 is summarised on page 66.
Shareholding guideline	Our existing shareholding guideline provides for the CEO to acquire and retain shares with a value equal to 200% of salary, and for other Executive Directors to acquire and retain shares with a value equal to 100% of salary. In line with best practice, this will be standardised at 200% of salary for all Executive Directors under the new policy.
Other changes	We already include malus and clawback provisions on our incentive arrangements for Executive Directors. In line with the revised Corporate Governance Code, these provisions will be extended to permit the application of malus and clawback in the event of a material corporate failure. Other minor amendments have been made to the policy as approved in 2015 either to reflect the changes referred to above, to aid the administration of the policy or to reflect changes in practice.

REMUNERATION COMMITTEE REPORT CONTINUED

Directors' remuneration policy continued

The new policy will be subject to a binding vote at the 2018 AGM.

Annual report on remuneration

The annual report on remuneration section of this report provides details of the amounts earned by Directors in respect of the year ended 31 July 2018 and how the Directors' remuneration policy will be operated for the year commencing 1 August 2018. This will be subject to an advisory vote at the 2018 AGM.

Remuneration decisions in respect of the year ended 31 July 2018

As referred to in the 2017 Directors' remuneration report, our Executive Directors' salaries for the year ended 31 July 2018 were not increased compared to the previous year.

The 2018 bonus opportunity for the Executive Directors was based on a combination of financial and corporate measures and challenging personal objectives. The Remuneration Committee determined that the corporate targets were not achieved and consequently no bonus was payable. Further information is set out on page 60.

Long-term incentive awards were granted in the year under the LTIP and further information is given on page 61. No long-term incentive awards vested in 2017/2018 as reported in note 21 to the financial statements; the LTIP awards granted in December 2015 were subject to performance conditions assessed over the three financial years ended 31 July 2018, the targets were not achieved and consequently the awards have lapsed.

Remuneration in the year commencing 1 August 2018

Subject to approval at the AGM, the new Directors' remuneration policy will be applied as follows in the year commencing 1 August 2018:

- The Board approved an increase in salary of 2.5% to Executive Directors.
- The Committee reviewed the remuneration with respect to the Executive team based on up to date market data and market comparisons. The analysis indicated that in the case of Dr Nigel Pickett, his base salary is no longer competitive to the market. Accordingly, the Committee agreed an increase in his salary, inclusive of an inflation award, bringing his base salary as of 1 August 2018 to £190,000.
- The Board approved an increase in salary of 2.5%, across the wider workforce to acknowledge inflation and to be used to support motivation and retention for staff below the Executive Director level.
- For the year commencing 1 August 2018, employer pension contributions above the amount of any salary sacrifice (and the associated employer National Insurance contributions savings) will continue to be capped at 5% of salary.
- Annual bonus opportunity for Executive Directors will remain at 100% of salary, subject to the achievement of stretching performance conditions. Half of any bonus earned will be delivered via an award of deferred shares under the DBP; further information is given on page 66.
- LTIP awards for the year commencing 1 August 2018 will be set at the usual policy level of 100% of salary. A summary of the proposed measures and weightings is set out on page 66. The details of the proposed targets, to the extent they are not disclosed on page 66, will be disclosed once they are not commercially sensitive.
- No increases to the Non-executive Director fee levels are proposed.

Board changes

Keith Wiggins and David Blain stepped down from the Board on 10 June 2018 and 20 August 2018 respectively. Information in relation to the remuneration arrangements related to them leaving the business is set out on page 64; all arrangements are in line with the Directors' remuneration policy approved in 2015.

Brian Tenner joined the Board in a new combined role of Chief Operating Officer and Chief Financial Officer with effect from 20 August; a summary of his remuneration arrangements is set out below. The Committee agreed a remuneration package to recruit Brian which reflected his calibre and experience and the additional responsibilities of the role reflecting its combined nature. In order to ensure appropriate alignment with shareholders, the Committee:

- agreed a notice period with Brian of six months, notwithstanding the ability within the approved Directors' remuneration policy to set a notice period of up to twelve months;
- agreed that the recruitment award would be made as an award over shares in the Company to ensure alignment with shareholders' interests; and
- agreed that the recruitment award would be subject to a two-year holding period following the end of the performance period to ensure that it is appropriately aligned with the longer-term performance of the Company.

Board changes continued

Base salary	£215,000 – the salary level was positioned to reflect the additional responsibilities and scope of the role reflecting its combined nature.
Pension	5% of base salary.
Annual bonus	In line with the policy, up to 100% of salary with 50% paid in cash and 50% in shares deferred for two further years.
LTIP	Participation in the LTIP will be at the same level as other Executive Directors.
Recruitment award	Award over 400,000 shares which will vest subject to the same performance conditions as apply to the LTIP awards to be granted in respect of FY19 as referred to on page 66. The award will be subject to a two-year holding period following the end of the performance period to ensure that it is appropriately aligned with the longer-term performance of the Company.

As a Committee, we believe that ongoing dialogue with our major shareholders is of key importance. Should you have any queries or feedback in relation to the Directors' remuneration report, please contact me through the Company Secretary.

Brendan Cummins
Remuneration Committee Chairman
16 October 2018

DIRECTORS' REMUNERATION REPORT

This Directors' remuneration report for the year ended 31 July 2018 complies with the requirements of the Listing Rules of the UK Listing Authority, Schedule 8 of the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 and the provisions of the UK Corporate Governance Code (September 2014). The Regulations require the auditor to report to the Company's members on certain parts of the Directors' remuneration report and to state whether, in its opinion, those parts of the report have been properly prepared in accordance with the accounting regulations. Items that are audited throughout this report are clearly marked as audited in the heading of the section.

Directors' remuneration policy

This part of the report sets out the Company's forward-looking Directors' remuneration policy that will be subject to a binding vote at the AGM on 13 December 2018. The Directors' remuneration policy is not audited.

The table below describes each of the elements of the remuneration package for the Executive Directors to be proposed at the 2018 AGM.

Element and purpose	Operation	Maximum opportunity	Performance measures
Base salary Core element of fixed remuneration that provides the basis to recruit and retain talent necessary to deliver the business strategy.	Normally reviewed annually; any increases generally apply from 1 August (but may be reviewed more frequently if required). When determining base salary levels, consideration is given to the following: • the role, responsibility and experience of the individual; • corporate and individual performance; • market conditions, including typical pay levels for comparable roles in companies of a similar size and complexity; and • the range of salary increases awarded across the Group.	Whilst there is no maximum salary, salary increases will normally be in line with the wider workforce. However, larger increases may be awarded in, but not limited to, the following circumstances: • where an Executive Director has been promoted or has had a change in scope or responsibility; • to take account of an individual's development or performance in a role (e.g. a newly appointed Executive Director's salary being increased to be aligned with the market over time); • where there has been a change in market practice; or • where there has been a change in the size and/or complexity of the business.	N/A
Benefits Provide a market-competitive benefits package and promote the wellbeing of employees.	Directors are entitled to receive reimbursement for out-of-pocket expenses incurred on Company business. Where tax is payable in respect of expenses incurred by Directors wholly and necessarily for business purposes, the Board has agreed that the relevant tax will be paid by the Company. The Company provides benefits, principally life assurance of eight times salary, for all Executive Directors. The benefits provided would be reviewed periodically, taking individual circumstances into consideration. Benefits provided may include, for example, medical insurance, relocation expenses, expatriate allowances and travel expenses.	Whilst the Committee has not set an absolute maximum on the level of benefits Executive Directors may receive, the value of benefits is set at a level which the Committee considers to be appropriately positioned taking into account relevant market levels based on the nature and location of the role, the level of benefits provided to other employees in the Group and individual circumstances.	N/A
Retirement benefits Provide market-competitive post-employment benefits to recruit and retain Directors of the calibre required for the business.	The Company currently operates a salary sacrifice pension arrangement under which Executives may elect to sacrifice salary and the Company pays an amount equal to the amount of the salary sacrifice, together with the employer National Insurance saved, into a private pension scheme. Executive Directors are also eligible to participate in the Company's defined contribution scheme (or such other pension plan as may be deemed appropriate). In appropriate circumstances, such as where contributions exceed the annual or lifetime allowance, Executive Directors may be permitted to take a cash supplement instead of contributions to a pension plan (this would not count towards the bonus or LTIP opportunity).	For the year commencing 1 August 2018, employer pension contributions above the amount of any salary sacrifice and employer NIC saved will be capped at 5% (2017: 5%) of salary. An overall contribution limit of up to 10% of base salary may be made in future years (in addition to the amount of any salary sacrifice and employer NIC saved) to take account of circumstances including, but not limited to, a change in the scope of the role, increase in responsibility and/or a change in the size and/or complexity of the business.	N/A

Directors' remuneration policy continued

Element and purpose	Operation	Maximum opportunity	Performance measures
Annual bonus Rewards and incentivises the achievement of annual objectives which are aligned with key financial and strategic goals and supports the enhancement of shareholder value.	Performance targets are set annually and payout levels are determined after the year end following the Committee's assessment of actual performance against set targets. At least 50% of any bonus earned is paid in cash and the balance is awarded in shares under the DBP which vest after two years. The Committee may decide not to operate deferral if it is determined that the amount to be deferred is too small to warrant the administrative burden. Deferred share awards may incorporate the right to receive (in cash or shares) the value of the dividends that would have been paid on the shares that vest; this may assume the reinvestment of dividends into shares on such terms as the Committee determines.	Maximum annual bonus opportunity is 100% of salary. The percentage of maximum bonus payable for the different levels of performance would be no greater than: Below threshold 0% On-target 60% Maximum 100%	Stretching performance targets are set each year, reflecting the business priorities that underpin Group strategy. Ordinarily, at least 75% will be subject to achievement of financial and/or corporate measures and the balance will be based on challenging personal objectives. The Committee retains discretion to apply different weightings in relevant circumstances.
Long-Term Incentive Plan ("LTIP") To reflect stakeholder philosophy, provide a longer-term retention mechanism and provide alignment with shareholders.	Under the LTIP, awards of conditional shares, restricted stock or nil-cost options (or similar cash equivalent) can be made with vesting dependent on the achievement of performance conditions, normally, over a three-year performance period. Under the LTIP, there will be no retesting of performance following the end of the performance period. After the end of the performance period the vested awards would normally be subject to a two-year holding period. LTIP awards may incorporate the right to receive (in cash or shares) the value of the dividends that would have been paid on the shares that vest; this may assume the reinvestment of dividends into shares on such terms as the Committee determines.	The maximum value of shares over which an individual can be granted an award in respect of a financial year is normally 100% of base salary, although this limit may be increased to 250% of base salary in exceptional circumstances. 25% of awards will vest for threshold levels of performance, rising to 100% for maximum performance.	The vesting of LTIP awards is subject to the satisfaction of performance targets set by the Committee. The performance measures are reviewed regularly to ensure they remain relevant but will be based on financial measures (which may include, but are not limited to, Group revenue targets and EPS) and/or share price related measures, and/or the achievement of strategic milestones. The relevant metrics and the respective weightings may vary each year based on Company strategic priorities.
Shareholding requirement To align Directors to shareholder interests.	A requirement to build up and hold a shareholding of at least 200% of base salary. 50% of vested shares under the DBP or LTIP (post-tax) are to be retained until the shareholding requirement has been met.	N/A	N/A

Notes to the policy table

Application of clawback and malus to variable remuneration

Under the DBP, during the two-year deferral period, the Committee has the right to reduce any deferred bonus awards which have not yet been released in the event of a material misstatement of the Group's financial results, a material misconduct on the part of the participant, a material corporate failure as determined by the Board or a material failure of risk management by the Group (i.e. a malus provision). For up to two years following the payment of a cash bonus award, the Committee may also require the repayment of some or all of the award in these circumstances (i.e. a clawback provision).

Under the 2015 LTIP, at any time prior to the end of the holding period for LTIP awards, the Committee in its discretion may reduce, cancel or impose further conditions on LTIP awards which have not yet been released in the event of a material misstatement of the Group's financial results, a material misconduct on the part of the participant, a material corporate failure as determined by the Board or a material failure of risk management by the Group.

Explanation of performance measures chosen

Selected performance measures for the annual bonus and LTIP awards reflect the Group's strategy. Stretching performance targets are set each year by the Committee taking into account a number of different factors.

Annual bonus

At least 75% of the potential maximum annual bonus will be subject to achievement of a combination of financial and corporate measures, whilst the balance will be based on challenging personal objectives. The Committee will disclose the metrics and performance against these on a retrospective basis to the extent that these are not commercially sensitive.

Notes to the policy table continued

Explanation of performance measures chosen continued

LTIP

The Company has historically used commercial revenue targets as its primary measure for LTIP awards for Executive Directors. Recognising that the Company's transition from a research and development company to a commercial, product-driven organisation presents a number of challenges to defining meaningful and appropriate performance metrics and targets. The awards granted under the LTIP will be based on share price growth. This metric will be subject to a performance underpin to ensure that the share price metric for the LTIP does not lead to behaviours that are divergent from the core commercialisation strategy and that appropriate developments are made in all areas of the business. It is the Committee's view that this is the most appropriate performance measure for determining LTIP vesting for the awards on the basis that:

- share price growth is a key measure of value delivered to shareholders and should reflect the achievement of commercial milestones. This ensures that this element only vests where significant value is delivered to shareholders; and
- the performance underpin ensures that the share price metric for the LTIP does not lead to behaviours that are divergent from the core commercialisation strategy and that appropriate development is made in all areas of the business.

The Committee intends to review the performance metrics for future awards taking into account the business priorities and strategy. Whilst it is recognised that EPS is not an appropriate metric for the awards at present given the current negative earnings of the Group, as the Group moves towards positive EPS, it may be considered an appropriate metric once the Group has developed a steady history of earnings.

The Committee also retains the discretion to adjust or set different performance measures or targets where it considers it appropriate to do so (for example, to reflect a change in strategy, a material acquisition and/or a divestment of a Group business or a change in prevailing market conditions) and to assess performance on a fair and consistent basis from year to year.

Operation of the LTIP and DBP

The LTIP and DBP are operated by the Committee in accordance with their respective rules, including the ability to adjust the number of shares subject to awards in the event of a variation of share capital, demerger, delisting, special dividend, rights issue or other event which may, in the opinion of the Company, affect the current or future value of shares. The "market value" of a share for the purposes of determining the number of shares subject to the LTIP or DBP award will be the average share price over the three dealing days following the announcement of results preceding the grant date, unless the Committee determines that an alternative basis should apply.

Early vesting of awards

As described on page 57, awards under the DBP and LTIP may vest earlier than anticipated in "good leaver" circumstances.

On a change of control of the Company or other relevant corporate event (such as a demerger, delisting, special dividend or other event which may affect the value of an award), the extent to which unvested awards will vest will be determined in accordance with the rules of the relevant plan.

Awards under the DBP will vest in full in the event of a takeover, merger or other relevant corporate event.

Awards under the LTIP will vest early on a takeover, merger or other relevant corporate event. The Committee will determine the level of vesting taking into account the extent to which the performance conditions are satisfied. Such vesting would ordinarily be on a time pro-rata basis, although the Committee has discretion not to apply time pro-rating.

How the Executive Directors' remuneration policy relates to the Group

The remuneration policy summarised above provides an overview of the structure that operates for the Executive Directors. The same broad structure also operates for the members of the senior management team, although with lower levels of participation in the annual bonus, DBP and/or the LTIP. For other employees, the same remuneration principles are applied and the Company aims to provide a remuneration package that is competitive in an employee's country of employment and which is appropriate to promote the long-term success of the Group.

Remuneration outcomes in different performance scenarios

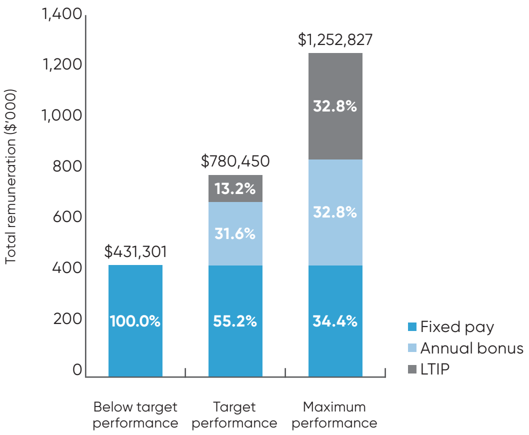
The charts below set out an illustration of the remuneration policy for 2019. The charts provide an illustration of the proportion of total remuneration made up of each component of the remuneration policy and the value of each component.

Three scenarios have been illustrated for each Executive Director:

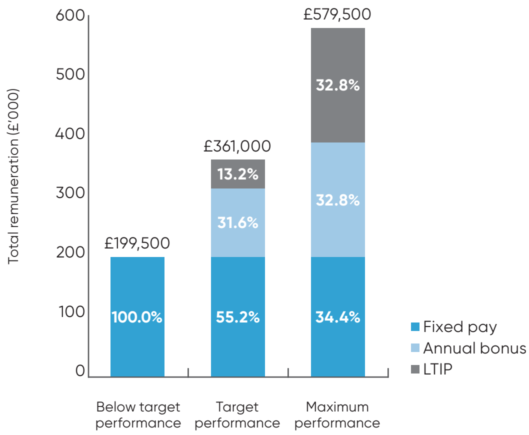
Below threshold performance	Fixed remuneration No annual bonus payout No vesting under the LTIP
Target performance	Fixed remuneration 60% annual bonus payout 25% vesting under the LTIP
Maximum performance	Fixed remuneration 100% annual bonus payout 100% vesting under the LTIP

Remuneration outcomes in different performance scenarios continued

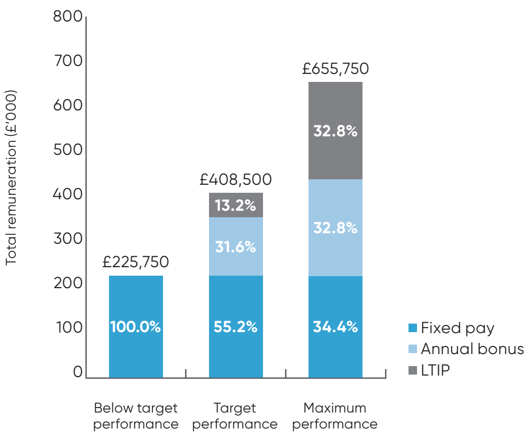
Dr Michael Edelman



Dr Nigel Pickett



Brian Tenner



Fixed pay currently comprises the following elements:

	Current base salary	Benefits*	Pension**	Total
Chief Executive Officer – Dr Michael Edelman	$410,763	–	$20,538	$431,301
Chief Technical Officer – Dr Nigel Pickett	£190,000	–	£9,500	£199,500
Chief Operating Officer and Financial Officer – Brian Tenner	£215,000	–	£10,750	£225,750

* No benefits are currently provided to the Executive Directors other than under the Group life assurance scheme.

** Based on 5% employer pension contribution/cash supplement in lieu of pension which applies for the year ended 31 July 2019.

The values illustrated assume a constant share price and do not take into account share price fluctuation or dividend equivalents that may be received under the share plans. The ultimate amounts received by the Directors may be higher or lower than the amounts illustrated above.

Remuneration policy for Non-executive Directors

Purpose and link to strategy	Operation	Other items
To enable the Company to attract and retain Non-executive Directors of the required calibre by offering market-competitive rates.	The Chairman's fee is determined by the Committee and the fees of the other Non-executive Directors are determined by the Board. Fees are set taking into account several factors, including the size and complexity of the business, fees paid to chairmen and non-executive directors of companies of a similar size and complexity and the expected time commitment and contribution for the role. Overall fees paid to Non-executive Directors will remain within the limits set by the Company's Articles of Association.	Non-executive Directors are provided with directors' and officers' insurance and indemnity protection and may be eligible to be reimbursed any reasonable hotel and travelling expenses and other reasonable expenses incurred in the performance of their duties. The Non-executive Directors do not participate in the Company's annual bonus, share plans or pension schemes.

Remuneration policy on recruitment

When hiring a new Executive Director, the Committee will seek to align the remuneration package with the above policy.

When determining appropriate remuneration arrangements, the Committee may include other elements of pay which it considers are appropriate and necessary to recruit and retain the individual. However, this discretion is capped and is subject to the limits referred to below:

- base salary will be set at a level appropriate to the role and the experience of the Director being appointed. This may include agreement on future increases up to a market rate, in line with increased experience and/or responsibilities, subject to good performance, where it is considered appropriate;
- benefits will only be provided in line with the above policy;
- pension contributions will only be provided in line with the above policy;
- the Committee will not offer non-performance related incentive payments (for example a "guaranteed sign-on bonus" or "golden hello");
- other elements may be included in the following circumstances:
  - an interim appointment being made to fill an Executive Director role on a short-term basis;
  - if exceptional circumstances require that the Chairman or a Non-executive Director takes on an Executive function on a short-term basis;
  - if an Executive Director is recruited at a time in the year when it would be inappropriate to provide a bonus or long-term incentive award for that year as there would not be sufficient time to assess performance. Subject to the limit on variable remuneration set out below, the quantum in respect of the months employed during the year may be transferred to the subsequent year so that reward is provided on a fair and appropriate basis; and
  - if the Director will be required to relocate in order to take up the position, it is the Company's policy to allow reasonable relocation, travel and subsistence payments. Any such payments will be at the discretion of the Committee;
- the Committee may also alter the performance measures, performance period and vesting period of the annual bonus or LTIP, if the Committee determines that the circumstances of the recruitment merit such alteration. The rationale for any such alterations will be clearly explained in the next Directors' remuneration report; and
- the maximum level of variable remuneration which may be granted (excluding "buyout" awards as referred to below) is 350% of salary, in line with the policy set out on pages 52 to 58.

The Committee may make payments or awards in respect of hiring an employee to "buy out" remuneration arrangements forfeited on leaving a previous employer. In doing so, the Committee will take account of relevant factors, including any performance conditions attached to the forfeited arrangements and the time over which they would have vested or been paid. The Committee will generally seek to structure buyout awards or payments on a comparable basis to the remuneration arrangements forfeited. Any such payments or awards are excluded from the maximum level of variable remuneration referred to above. "Buyout" awards will ordinarily be granted on the basis that they are subject to forfeiture or "clawback" in the event of departure within twelve months of joining the Company, although the Committee will retain discretion not to apply forfeiture or clawback in appropriate circumstances.

Any share awards referred to in this section will be granted as far as possible under the Company's existing share plans. If necessary, and subject to the limits referred to above, recruitment awards may be granted outside of these plans.

Where a position is filled internally, any ongoing remuneration obligations or outstanding variable pay elements shall be allowed to continue in accordance with their terms.

Fees payable to a newly appointed Chairman or Non-executive Director will be in line with the policy in place at the time of appointment.

External appointments

The Company recognises that Executive Directors may be invited to become non-executive directors of other companies and that this can help broaden the skills and experience of a Director. Subject to the approval of the Board, Executive Directors are normally permitted to accept external appointments and may retain fees for such appointments where no significant actual or potential conflict of interest arises and provided that the Director is able to maintain his time commitment to the Company.

Payment for loss of office

The Company's policy is that Executive Directors' service contracts should be capable of termination on not more than twelve months' notice. The principles on which the determination of payments for loss of office will be approached are set out below:

	Policy
Payment in lieu of notice	The Company has discretion to make a payment in lieu of notice. Such a payment would include base salary and compensation for benefits for the unexpired period of notice, up to a maximum of twelve months' notice.
Annual bonus	This will be at the discretion of the Committee on an individual basis and the decision as to whether or not to award an annual bonus award in full or in part will be dependent on a number of factors, including the circumstances of the individual's departure and their contribution to the business during the annual bonus period in question. Any annual bonus award amounts paid will normally be pro-rated for time in service during the annual bonus period and will, subject to performance, be paid at the usual time (although the Committee retains discretion to pay the annual bonus award earlier in appropriate circumstances). Any such bonus can, at the discretion of the Committee, be paid wholly in cash.
DBP	The extent to which any unvested award will vest will be determined in accordance with the rules of the DBP. Unvested awards will normally lapse on cessation of employment. However, if a participant leaves due to death, ill health, injury, disability, the sale of his employer or any other reason at the discretion of the Committee, the Committee shall determine whether any unvested award will vest at cessation or at the normal vesting date. In either case, the extent of vesting will be determined by the Committee, taking into account, unless the Committee determines otherwise, the period of time elapsed from the date of grant to the date of cessation relative to the deferral period. Awards may then be exercised during such period as the Committee determines. Awards (in the form of nil-cost options) which have vested but remain unexercised at the date of cessation may be exercised if a participant leaves due to death, ill health, injury, disability, the sale of his employer or any other reason at the discretion of the Committee. Awards may then be exercised for such period as the Committee determines.
LTIP	The extent to which any unvested award will vest will be determined in accordance with the rules of the LTIP. Unvested awards will normally lapse on cessation of employment. However, if a participant leaves due to death, ill health, injury, disability, the sale of his employer or any other reason at the discretion of the Committee, the Committee shall determine whether the award is released on the normal release date or the date of cessation (or on some other date). In any case, the extent of vesting will be determined by the Committee taking into account the extent to which the performance condition is satisfied and, unless the Committee determines otherwise, the period of time elapsed from the date of grant to the date of cessation relative to the performance period. Awards may then be exercised during such period as the Committee determines. If a participant leaves for any reason (other than summary dismissal) after an award has vested but before it has been released (i.e. during the holding period), his award will ordinarily continue to the normal release date when it will be released to the extent it vested. The Committee retains discretion to release awards when the participant leaves. If the participant is summarily dismissed, his award will lapse. Awards (in the form of nil-cost options) which have vested and been released but remain unexercised at the date of cessation may be exercised if a participant leaves due to death, ill health, injury, disability, the sale of his employer or any other reason at the discretion of the Committee. Awards may then be exercised for such period as the Committee determines.
Mitigation	The Committee's practice is that if an Executive Director's employment is terminated any compensation payment will be calculated in accordance with normal legal principles including the application of mitigation to the extent appropriate to the circumstances of the termination.
Other payments	In appropriate circumstances, payments may also be made in respect of accrued holiday, outplacement and legal fees.

Where a buyout award is made, the leaver provisions would be determined at the time of the award.

The Committee reserves the right to make additional exit payments where such payments are made in good faith in discharge of an existing legal obligation (or by way of damages for breach of such an obligation) or by way of settlement or compromise of any claim arising in connection with the termination of a Director's office or employment.

Where the Committee retains discretion it will be used to provide flexibility in certain situations, taking into account the particular circumstances of the Director's departure and performance.

There is no entitlement to any compensation in the event of Non-executive Directors' fixed-term agreements not being renewed or the agreement terminating earlier.

Consideration of employees' pay

The Committee generally considers pay and employment conditions elsewhere in the Company when considering the Directors' remuneration. When considering base salary increases, the Committee reviews overall levels of base pay increases offered to other employees. Employees are not actively consulted on Directors' remuneration. Employee share ownership is fundamental to the Company's culture and is reflected in the wide participation in our share incentive plans.

Existing contractual arrangements

The Committee retains discretion to make any remuneration payment and/or payment for loss of office outside the policy in this report:

- where the terms of the payment were agreed before the policy came into effect provided that, in the case of any payment agreed on or after 10 December 2015, they are in line with the Directors' remuneration policy approved at the 2015 AGM;
- where the terms of the payment were agreed at a time when the relevant individual was not a Director of the Company and, in the opinion of the Committee, the payment was not in consideration of the individual becoming a Director of the Company; and
- to satisfy contractual commitments under legacy remuneration arrangements.

For these purposes, "payments" includes the satisfaction of awards of variable remuneration and, in relation to an award over shares, the terms of the payment are agreed at the time the award is granted.

Consultation with shareholders

The Committee considers shareholder feedback received on remuneration matters, as well as any additional comments received during any other meetings with shareholders. The Committee has consulted with major shareholders in respect of the changes to the remuneration policy to be proposed at the 2018 AGM.

ANNUAL REPORT ON REMUNERATION

This report sets out details of the amounts earned during 2018 and provides details as to how the Committee intends to implement the policy during 2019. This part of the report will be subject to an advisory shareholder vote at the 2018 AGM. This report contains unaudited information except where stated that it is audited.

Remuneration Committee

The Committee comprises Brendan Cummins, who is Chairman of the Committee, and Dr Alison Fielding, each of whom is considered to be independent. The Committee may invite anyone it deems appropriate to attend and advise at meetings, including the Chief Executive Officer and the Chief Financial Officer, although no Director is present when his own remuneration is being discussed. The Committee is responsible for establishing a formal and transparent procedure for developing policy on executive remuneration and for setting the remuneration of the Directors and certain senior management, as well as reviewing the performance of the Executive Directors of the Company. The terms of reference of the Remuneration Committee can be found in the Investor section of the Group's website.

The Committee met seven times during the year, its meetings are minuted and its recommendations are presented to the Board.

Policy on other appointments

The Board believes that Directors should be able to accept other appointments where no significant actual or potential conflicts of interest arise and provided that the Director is able to maintain his time commitment to the Company. These other appointments enable Directors to accrue further skills and experience from which the Company benefits. This policy is reviewed annually. None of the Executive Directors had any other external appointments during the year ended 31 July 2018. Brian Tenner was appointed as a Director after the year end and he has one external appointment.

Advisers to the Committee

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 year, the Committee was assisted in its work by the following external consultants:

Adviser	Details of appointment	Services provided by the adviser	Fees paid by the Company for advice to the Remuneration Committee and basis of charge	Other services provided to the Company in the year ended 31 July 2018
Deloitte LLP ("Deloitte")	Appointed by the Remuneration Committee in June 2015.	Various advice on executive remuneration.	The fees for advice provided to the Committee during the financial year were £12,500 (2017: £8,000). Charged on a time/cost basis or fixed fee dependent on nature of project.	Advice regarding employee share plans and remuneration disclosure.

Deloitte is a member of the Remuneration Consultants' Group and, as such, voluntarily operates under its Code of Conduct in relation to executive remuneration consulting in the UK. The Remuneration Committee took into account the Code of Conduct when reviewing the appointment of Deloitte. The Committee is satisfied that the remuneration advice provided by Deloitte is objective and independent.

ANNUAL REPORT ON REMUNERATION CONTINUED

Single total figure of remuneration for 2018 – Executive Directors (audited information)

The remuneration of the Directors who served on the Board of Nanoco Group plc during the year to 31 July 2018 is as follows:

	Base salary and fees £'000	Benefits in kind[4] £'000	Annual bonus in cash £'000	Annual bonus in shares £'000	Long-term incentives £'000	Pension £'000	**Total 2018 £'000**
Executive Directors							
Dr Michael Edelman[1]	297	–	–	–	–	15	**312**
Dr Nigel Pickett	173	–	–	–	–	9	**182**
David Blain[2]	181	–	–	–	–	9	**190**
Total Executive Directors	**651**	**–**	**–**	**–**	**–**	**33**	**684**
Former Executive Directors							
Keith Wiggins[3]	177	–	–	–	–	9	**186**
Non-executive Directors							
Dr Christopher Richards	75	–	–	–	–	–	**75**
Brendan Cummins	35	–	–	–	–	–	**35**
Dr Alison Fielding	35	–	–	–	–	–	**35**
Total Non-executive Directors	**145**	**–**	**–**	**–**	**–**	**–**	**145**
Total	**973**	**–**	**–**	**–**	**–**	**42**	**1,015**

1 Dr Michael Edelman's remuneration is paid in US Dollars but reported in Sterling for the purpose of this table. The exchange rate used for this purpose varied throughout the year. The rates used were in the range 1.3042 to 1.4195.

2 David Blain resigned on 20 August 2018. Information in relation to payments made and to be made to David Blain after 31 July 2018 is set out on page 64.

3 Keith Wiggins resigned on 10 June 2018. The single total figure of remuneration table above sets out details of remuneration earned by Keith Wiggins up to the date of his resignation. Information in relation to payments for loss of office and other payments made and to be made to Keith Wiggins after this date is set out on page 63.

4 The life cover provided to Executive Directors is contained within a policy covering all employees and it is not possible to identify the proportion of the premium in respect of either Directors individually or as a whole.

The remuneration of the Directors who served on the Board of Nanoco Group plc during the year to 31 July 2017 was as follows:

	Base salary and fees £'000	Benefits in kind[5] £'000	Annual bonus in cash £'000	Annual bonus in shares £'000	Long-term incentives £'000	Pension £'000	Total 2017 £'000
Executive Directors							
Dr Michael Edelman[1]	311	–	–	–	–	16	327
Dr Nigel Pickett	173	–	–	–	–	9	182
Keith Wiggins	193	–	–	–	–	10	203
David Blain	181	–	–	–	–	9	190
Total Executive Directors	858	–	–	–	–	44	902
Non-executive Directors							
Dr Christopher Richards	75	–	–	–	–	–	75
Brendan Cummins	35	–	–	–	–	–	35
Dr Alison Fielding[2]	7	–	–	–	–	–	7
Total Non-executive Directors	117	–	–	–	–	–	117
Former Non-executive Directors							
Gordon Hall[3]	17	–	–	–	–	–	17
Robin Williams[4]	35	–	–	–	–	–	35
Total former Non-executive Directors	52	–	–	–	–	–	52
Total	1,027	–	–	–	–	44	1,071

1 Dr Michael Edelman's remuneration is paid in US Dollars but reported in Sterling for the purpose of this table. The exchange rate used for this purpose varied throughout the year. The rates used were in the range 1.2185 to 1.31096.

2 Dr Alison Fielding was appointed to the Board on 20 April 2017.

3 Gordon Hall resigned on 31 January 2017.

4 Robin Williams resigned on 13 July 2017.

5 The life cover provided to Executive Directors is contained within a policy covering all employees and it is not possible to identify the proportion of the premium in respect of either Directors individually or as a whole.

ANNUAL REPORT ON REMUNERATION CONTINUED

Additional disclosures in relation to single figure table (audited information)

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

(a) Salary and fees	The amount of salary/fees received in the year or to the date of retirement from the Board if sooner. A salary sacrifice arrangement is operated under which Executives may elect to sacrifice salary and the Company pays an amount equal to the amount of the salary sacrifice, together with the employer National Insurance saved, into a private pension scheme. Directors' salaries are shown before the salary sacrifice pension contributions.
(b) Benefits	The taxable value of benefits received in the year.
(c) Bonus	N/A
(d) Long-term incentives	N/A
(e) Pension	The pension figure represents the cash value of Company pension contributions and/or cash in lieu of pension contributions paid to the Executive Directors. This does not include the amount of the salary sacrifice paid as a pension but does include the employer National Insurance saved that is paid into a private pension scheme.

Individual elements of remuneration for the year ended 31 July 2018

Base salary

As referred to in the 2017 Directors' remuneration report our Executive Directors' salaries for the year ended 31 July 2018 were $400,744 in the case of our Chief Executive Officer, £172,559 in the case of our Chief Technology Officer, £192,860 for our Chief Operating Officer and £180,900 for our Chief Financial Officer, the same as for the year ended 31 July 2017.

Annual bonus

For the year ended 31 July 2018, the maximum bonus for Dr Michael Edelman, Dr Nigel Pickett, Keith Wiggins and David Blain was 100% of salary. The annual bonuses comprise two elements: achievement of financial and corporate measures (80% of salary) and achievement of personal objectives (20% of salary). Bonus for personal objectives is only payable if corporate objectives are achieved. The Remuneration Committee determined that 0% of salary should be awarded as a bonus for each Director in relation to achievement of corporate objectives (compared to a maximum of 80%) and as a result no bonus was payable for personal objectives. The Committee fully acknowledges and appreciates the excellent progress made on a number of fronts during the year. The work which the whole team has put in has been exemplary and the fruits of this effort and of the progress made will only come to fruition in the year(s) ahead. However, these efforts notwithstanding, the Committee was of the view that the actual results and the evaluation of these do not warrant a bonus award.

The financial and corporate measures and their weighting as a percentage of salary for the year ended 31 July 2018 were:

Measure and weighting as a percentage of salary	Threshold performance level	Maximum performance level	Performance achieved	Bonus earned as a percentage of salary
Revenue (60%)	£4 million	£10 million	£3.3 million	Nil
EBITDA (20%)	Loss of £5.1 million	Loss of £1.79 million	Loss of £6,429 million	Nil

Although no bonus was earned by reference to the personal objectives because the corporate objectives were not achieved, for completeness the personal objectives and achievements are summarised in the tables opposite.

Specific bonus targets have not been disclosed by the Committee where they are considered to be commercially sensitive. The current stage of the Group's development means certain retrospective information could still give competitors insight into the strategic plans of the business, which is not in the interest of shareholders.

ANNUAL REPORT ON REMUNERATION CONTINUED

Individual elements of remuneration for the year ending 31 July 2018 continued

Annual bonus continued

Director	Measure	Weighting (% of maximum bonus opportunity)	Achievement
Dr Michael Edelman	**Financial and corporate measures**	80	Not achieved as referred to above
	Personal objectives	20	
	Divest solar business		Not achieved
	Create one additional strategic partnership		Achieved
	Spin out Nanoco Life sciences		Ongoing
Dr Nigel Pickett	**Financial and corporate measures**	80	Not achieved as referred to above
	Personal objectives	20	
	Project 1		Partially achieved
	Project 2		Achieved
	Project 3		Not achieved
Keith Wiggins	**Financial and corporate measures**	80	Not achieved as referred to above
	Personal objectives	20	
	Commence Display sales and achieve target		Not achieved
	Deliver a defined robust sales pipeline looking out beyond July 2018		Not achieved
	Deliver internal project		Achieved
David Blain	**Financial and corporate measures**	80	Not achieved as referred to above
	Personal objectives	20	
	Upgrade accounting systems		Ongoing
	Monitor and control cost base		Achieved
	Deliver internal project		Achieved

Long-term incentives vesting in respect of the year ended 31 July 2018

No long-term incentives vested during the year ended 31 July 2018; the LTIP awards granted in December 2015 were subject to performance conditions assessed over the three financial years ended 31 July 2018, the targets were not achieved and consequently the awards have lapsed.

LTIP awards granted in 2018

Awards to the Executive Directors made on 6 December 2017 were as follows:

Director	Type of award	Percentage of salary %	Number of shares	Face value* at grant £'000	Face value at grant less exercise price £'000	% of award vesting at threshold	Performance period Years
Dr Michael Edelman	Share award	100	1,149,106	304	304	25	3
Dr Nigel Pickett	Share award	100	653,137	173	173	25	3
Keith Wiggins	Share award	100	729,977	193	193	25	3
David Blain	Share award	100	684,708	181	181	25	3

* Face value has been calculated using the average closing share price for the three dealing days following the release of the Company's results for the preceding financial year of £0.2642 in accordance with the rules of the LTIP approved by shareholders at the 2015 AGM. Dr Michael Edelman's grant was computed using an exchange rate of $1.32/£1.

These awards are subject to the following share price growth and Group revenue performance conditions measured over three financial years ending 31 July 2020.

50% based on share price growth target measured over three financial years ending 31 July 2020

% of share price element vesting	Share price target
25	£1.05
100	£1.60

To encourage maximum performance, the value of the award accelerates as the share price approaches the 160 pence level. The principle we have agreed in the Remuneration Committee is a curved line vesting. The Company's share price will be averaged across a three-month period (unless the Committee decides to apply a different averaging period) to avoid rewarding for short-term spikes in performance.

ANNUAL REPORT ON REMUNERATION CONTINUED

LTIP awards granted in 2018 continued

50% based on Group revenue targets measured over three financial years ending 31 July 2020

% of Group revenue element vesting	Group revenue target
25	2020 threshold revenue target
100	2020 maximum revenue target

Given the Group is entering a new stage in its development, the Directors consider that the Group revenue targets are matters which are commercially sensitive; they provide our competitors with insight into our business plans and expectations and should therefore remain confidential to the Group. However, in order to maintain transparency, the Committee will disclose the Group revenue targets and how the Group has performed against the targets set following the end of the performance period.

A core strategy of the business is to continue the development of our Lighting and Bio-imaging businesses with a long-term aim of transforming them into profitable businesses shipping commercial quantities of product. Under the performance underpin requirement, if the Committee is not satisfied that appropriate progress has been made across the business it will have the discretion to cancel all or some of the LTIP award.

Performance achieved versus targets for LTIPs granted in 2015

The performance period for the LTIPs granted in 2015 ended on 31 July 2018 and the outcome was as follows:

	Threshold target	Achieved	Maximum target	Achieved
Revenue	£27 million	No	£37 million	No
Share price	£2.10	No	£3.00	No

Accordingly these options have lapsed.

Statement of Directors' shareholding and share interests (audited information)

Directors' interests in share options to acquire ordinary shares of 10 pence in the Company as at 31 July 2018 (or, if earlier, the date on which they stepped down from the Board) were:

Share options	Date granted	Exercise price	At 31 July 2017	Exercised during the year	Lapsed	Granted during the year	At 31 July 2018[1]
Dr Michael Edelman	25 Nov 2011	50.00p	500,000[2]	–	–	–	**500,000**
	22 Oct 2012	57.00p	1,000,000[2]	–	–	–	**1,000,000**
	23 Dec 2015	Nil	443,548[5]	–	–	–	**443,548**
	22 Nov 2016	Nil	841,145[3]	–	–	–	**841,145**
	6 Dec 2017	Nil	1,149,106[3]	–	–	1,149,106	**1,149,106**
Dr Nigel Pickett	25 Nov 2011	50.00p	500,000[2]	–	–	–	**500,000**
	22 Oct 2012	57.00p	750,000[2]	–	–	–	**750,000**
	23 Dec 2015	Nil	284,193[5]	–	–	–	**284,193**
	22 Nov 2016	Nil	505,164[3]	–	–	–	**505,164**
	6 Dec 2017	Nil	653,137[3]	–	–	653,137	**653,137**
Keith Wiggins[6]	14 Oct 2014	10.00p	380,000[4]	–	380,000	–	**–**
	23 Dec 2015	Nil	317,627[5]	–	–	–	**317,627**
	22 Nov 2016	Nil	717,896[3]	–	–	–	**717,896**
	6 Dec 2017	Nil	729,977[3]	–	–	729,977	**729,977**
David Blain[6]	23 Dec 2015	Nil	350,000[5]	–	–	–	**350,000**
	22 Nov 2016	Nil	690,913[3]	–	–	–	**690,913**
	6 Dec 2017	Nil	684,708[3]	–	–	674,708	**684,708**

1 Or if earlier the date on which the individual stepped down from the Board.

2 Vested but unexercised share options.

3 Unvested share options still subject to performance conditions.

4 Lapsed in the year as vesting conditions were not met.

5 Lapsed following year end as vesting conditions not met.

6 The treatment of Keith Wiggins' and David Blain's share awards on leaving the business is described on page 64.

ANNUAL REPORT ON REMUNERATION CONTINUED

Deferred Bonus Plan awards granted in FY17

On 22 November 2016, awards in the form of nil-cost options were granted to the Executive Directors in respect of 50% of their bonuses for the year ended 31 July 2016 which are delivered in the form of a share award under the Deferred Bonus Plan. The awards will vest on the date on which the Company announces its preliminary results for the year ending 31 July 2018.

Director	Number of shares	Face value of award at date of grant £'000
Dr Michael Edelman	108,181	57
Dr Nigel Pickett	66,576	34
Keith Wiggins	74,408	39
David Blain	69,794	36

In order to align the interests of Executive Directors with those of shareholders and to demonstrate the Executive Directors' ongoing personal financial commitment to the business, Executive Directors will be expected to build up a shareholding. Under the policy approved by shareholders at the 2015 AGM, the required holding is 200% of salary for the CEO and 100% of salary for all other Executive Directors. Under the policy for which approval will be sought at the 2018 AGM, the required holding is standardised at 200% of salary for all Executive Directors. Executive Directors are expected to retain 50% of any post-tax shares that vest under any share incentive plans until this shareholding is reached.

Both Dr Michael Edelman and Dr Nigel Pickett hold shares substantially in excess of the shareholding guideline (circa 436% and 2,837% of salary respectively using the three-month average closing share price to the end of July 2018).

Non-executive Directors are not subject to the shareholding requirement.

Directors' interests in the shares of the Company, including family and beneficial interests, at 31 July 2018 (or, if earlier, the date on which they stepped down from the Board) were:

	Ordinary shares of 10p each			
	31 July 2018[1] Number	**31 July 2018[1] %**	31 July 2017 Number	31 July 2017 %
Dr Christopher Richards	**285,496**	**0.10**	118,830	0.05
Dr Michael Edelman	**3,124,350**	**1.09**	4,931,615	2.07
Dr Nigel Pickett	**11,112,347**	**3.89**	10,945,681	4.59
Keith Wiggins	**55,555**	**0.02**	–	–
David Blain	**153,588**	**0.05**	14,700	0.01
Brendan Cummins	**277,777**	**0.10**	–	–
Dr Alison Fielding	**–**	**–**	–	–
	14,953,558	**5.25**	16,010,826	6.72

1 Or if earlier the date on which the individual stepped down from the Board.

None of the Directors in office as at 31 July 2018 had any interests at that date in shares of any other Group company.

The market price for Nanoco shares as at 31 July 2018 was 42.5 pence per share; the highest and lowest prices during the year were 48.9 pence and 22.5 pence respectively.

Details of share options are set out in note 21 to the financial statements.

Dilution

The Company complies with the relevant institutional investor guidelines on employee share plans which state that in any ten-calendar-year period the Company may not issue more than 10% of the issued ordinary share capital of the Company under the LTIP Plan or any other employee share plan adopted by the Company. Including only option grants post admission to AIM and excluding any awards that have lapsed, the current dilution is 6.3%.

Payments to past Directors and for loss of office (audited information)

Keith Wiggins

Keith Wiggins stepped down as Chief Operating Officer and as a Director of Nanoco Group plc on 10 June 2018. Remuneration earned by Keith Wiggins in the period to 10 June 2018 in respect of the year ended 31 July 2018 is included in the single total figure of remuneration table on page 59. Details of the remuneration payments made or to be made to Keith Wiggins are set out below:

1. Salary and benefits

Until the expiration of his notice period on 31 December 2018 (the "notice expiry date"), Keith will receive his normal remuneration payments in respect of salary and pension contributions and continue to be entitled to his normal contractual benefits, in accordance with his service agreement. However, if the notice expiry date is brought forward, for example, where Keith commences alternative full-time paid employment prior to the notice expiry date, these contractual payments will cease and accordingly in such circumstances Keith will not receive any payments for, what would otherwise be, the remainder of his notice period. Keith received a payment of £1,000 as compensation for termination of his employment and a contribution of £456, plus VAT, in relation to legal fees incurred by him connected with the termination of his employment.

ANNUAL REPORT ON REMUNERATION CONTINUED

Payments to past Directors and for loss of office (audited information) continued

Keith Wiggins continued

2. Bonus for the year ended 31 July 2018

No bonus was earned for the year ended 31 July 2018.

3. Share awards

In respect of Keith's outstanding share awards, he will be treated as a good leaver under the following plans as specified in the rules of the relevant plan:

- Deferred Bonus Plan. The award made under the Deferred Bonus Plan in 2016 over 74,408 shares will vest following the announcement of the FY18 results, in accordance with the rules of the plan.
- LTIP 2016 award. The Remuneration Committee has determined that the options over 717,896 shares granted in 2016 under the LTIP will be reduced to take account of the notice expiry date and accordingly up to 478,597 shares will vest following 31 July 2019, subject to satisfaction of the performance conditions and the rules of the LTIP and will be released in September 2021 following the end of the holding period. The remaining options over 239,299 shares will lapse on the notice expiry date.
- LTIP 2017 award. The Remuneration Committee has determined that the options over 729,977 shares granted in 2017 under the LTIP Plan will be reduced to take account of the notice expiry date and accordingly up to 243,326 shares will vest following 31 July 2020, subject to satisfaction of the performance conditions and the rules of the LTIP and will be released in September 2022 following the end of the holding period. The remaining options over 486,651 shares will lapse on the notice expiry date.

Other than the amounts disclosed above, Keith will not be eligible for any remuneration payments or payments for loss of office.

David Blain

David Blain stepped down from his position as Chief Financial Officer on 20 August 2018 as a result of a structured reorganisation of the Company's Executive team following the resignation of Keith Wiggins as Chief Operating Officer in June. David will remain with Nanoco until 15 October 2018 to facilitate an orderly handover of his duties. Details of the remuneration payments made or to be made to David are set out below. The Committee determined the remuneration arrangements and, in particular, the treatment of David's 2016 and 2017 LTIP awards, having regard to David's contribution to the Company, his ongoing support to the Company up to 15 October, and his stepping down being as a result of the reorganisation of the Executive team.

1. Salary and benefits

David will receive his normal remuneration payments in respect of salary and pension contributions and continue to be entitled to his normal contractual benefits, in accordance with his service agreement, up to 15 October 2018 (the "termination date").

Within 28 days of the termination date, the Company will pay David £94,675 being the equivalent of six months' salary and pension contributions as payment in lieu of notice, £13,500 in respect of untaken holiday and a statutory redundancy payment and a contribution of up to £1,500, plus VAT in relation to legal fees incurred by him connected with the termination of his employment.

2. Bonus for the year ended 31 July 2018

No bonus was earned for the year ended 31 July 2018.

3. Share awards

In respect of David's outstanding share awards, he will be treated as a good leaver under the following plans as specified in the rules of the relevant plan. Taking into account the circumstances of the cessation and David's contribution to the Company, the Remuneration Committee determined not to reduce the LTIP awards to take account of the date of cessation and that it would be appropriate not to impose the post-vesting holding period, should either of the awards vest.

- Deferred Bonus Plan. The award made under the Deferred Bonus Plan in 2016 over 69,794 shares will vest following the announcement of the FY18 results in accordance with the rules of the plan.
- LTIP 2016 award. The Remuneration Committee has determined that the options over 690,913 shares granted in 2016 under the LTIP will continue to be held and will vest and be released following 31 July 2019, subject to satisfaction of the performance conditions and the rules of the LTIP.
- LTIP 2017 award. The Remuneration Committee has determined that the options over 684,708 shares granted in 2017 under the LTIP Plan will continue to be held and will vest and be released following 31 July 2020, subject to satisfaction of the performance conditions and the rules of the LTIP.

Other than the amounts disclosed above, David will not be eligible for any remuneration payments or payments for loss of office.

Unaudited information

Historical comparative TSR performance graph

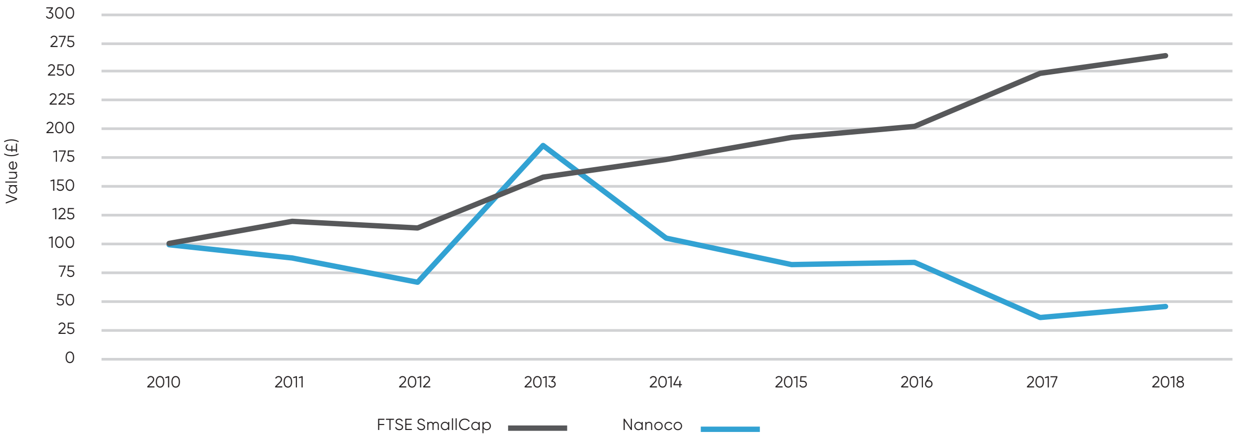
The performance graph below shows the Company's total shareholder return ("TSR") against the FTSE SmallCap over the period from 1 August 2010 to 31 July 2018. In the opinion of the Board, the FTSE SmallCap is the most appropriate index against which the TSR of the Company should be measured because it represents a broad equity market index of which the Company is a constituent member.

ANNUAL REPORT ON REMUNERATION CONTINUED

Unaudited information continued

Historical comparative TSR performance graph continued

Total shareholder return



The graph shows the value at 31 July 2018 of £100 invested in the Company's shares on 1 August 2010 compared with the value of £100 notionally invested in the FTSE SmallCap index. The other points plotted are the values at intervening financial year ends.

Chief Executive Officer remuneration	2011	2012	2013	2014	2015	2016	2017	**2018**
Total remuneration £'000*	175	182	707	293	635	406	327	**312**
Annual bonus (% of maximum vesting)	33	25	73	56	56	40	–	**–**
LTIP (% of maximum vesting)	–	–	–	–	100	–	–	**–**

* Dr Michael Edelman's remuneration is paid in US Dollars but reported in Sterling for the purpose of this table. The exchange rate used for this purpose varied during the year.

Percentage change in the remuneration of the CEO

The table below shows the movement in the salary, benefits and annual bonus for the Chief Executive Officer between the current and previous financial year compared with the cost for the same elements for all employees in the Group.

	Salary			Taxable benefits			Bonus		
	2018 £'000	2017 £'000	Change %	**2018 £'000**	2017 £'000	Change %	**2018 £'000**	2017 £'000	Change %
CEO*	**297**	311	(4.5)%	**–**	–	–	**–**	–	–
Average for all other employees	**48**	43	11.7%	**–**	–	–	**3**	–	N/A

* Dr Michael Edelman's remuneration is paid in US Dollars but reported in Sterling for the purpose of this table. The exchange rate used for this purpose varied during the year. Dr Edelman's salary of $400,744 for 2017 was not changed for 2018; the percentage change referred to reflects movements in the exchange rate.

Relative importance of spend on pay

The following table sets out the percentage change in dividends and the overall expenditure on pay (as a whole across the organisation).

	Year ended 31 July 2018 £'000	Year ended 31 July 2017 £'000	% change
Dividends	**–**	–	–
Overall expenditure on pay	**5,320**	5,705	(6.7)%

Implementation of policy for the year commencing 1 August 2018

Base salary

Base salaries are reviewed annually with effect from 1 August. For the year commencing 1 August 2018 Executive Directors will receive a base salary increase of 2.5% which is the same as given to the wider workforce and Dr Pickett's salary was increased further (as explained on page 49) as follows:

	2019	2018	% change
Chief Executive Officer – Dr Michael Edelman	**$410,763**	$400,744	2.5
Chief Technical Officer – Dr Nigel Pickett	**£190,000**	£172,559	10.1
Chief Operating Officer and Chief Financial Officer – Brian Tenner	**£215,000**	–	–

ANNUAL REPORT ON REMUNERATION CONTINUED

Unaudited information continued

Implementation of policy for the year commencing 1 August 2018 continued

Changes to Non-executive Directors' fees

No changes are proposed to the Non-executive Directors' fees for 2019 which will, therefore, be as follows:

	2019	2018
Chairman	**£75,000**	£75,000
NED base fee	**£25,000**	£25,000
Chair of Committee fee	**£10,000**	£10,000

Pension

The Company operates a salary sacrifice pension arrangement. For the year commencing 1 August 2018, employer pension contributions above the amount of any salary sacrifice (and the associated employer National Insurance contributions savings) will be capped at 5% of salary.

Annual bonus

For the year ending 31 July 2019, the maximum annual bonus potential will be 100% of base salary for Executive Directors. At least 50% of any such bonus earned will be paid in cash, whilst the remainder is paid as deferred shares under the DBP vesting after two years, in accordance with the policy to be adopted at the 2018 AGM. This reflects our stakeholder philosophy, provides a longer-term retention mechanism and provides alignment with shareholders.

Consistent with the 2018 annual bonus, performance will be assessed on the basis of a balanced scorecard approach in respect of performance measures; however, the emphasis on achievement of corporate goals is changed compared to 2018. 80% of the potential maximum annual bonus will be subject to achievement of a combination of financial and corporate measures, whilst the balance will be based on challenging personal objectives. The financial/corporate measures for FY19 will include annual revenue and EBITDA weighted 60%:20% respectively. The Committee will disclose the metrics and performance against these on a retrospective basis to the extent that these are not commercially sensitive.

Clawback will apply to any cash bonus paid and malus provisions to any unvested deferred bonus award.

Long-term incentive

The Committee intends to approve the grant of LTIP awards for the Executive Directors for the year ending 31 July 2019.

The awards for each Director are as follows:

Director	Type of award	Percentage of salary %
Dr Michael Edelman	Share award	100
Dr Nigel Pickett	Share award	100
Brian Tenner	Share award	100

The number of LTIPs awarded will be based on the three-day average share price following the announcement of the Company's results, unless the Committee determines otherwise.

These awards will be subject to the following performance conditions:

Based on share price growth measured over three financial years ending 31 July 2021

% of share price element vesting	Share price target
25	£0.66
100	£1

The value of the award increases in a straight-line basis between the threshold and maximum performance. The Company's share price will be averaged across a three-month period (unless the Committee decides to apply a different averaging period) to avoid rewarding for short-term spikes in performance. The target share prices are based on three-year compound annual growth increases of 15% and 32% from the price at 31 July 2018.

Performance underpin

A core strategy of the business is to continue the development of our Lighting and Bio-imaging divisions with a long-term aim of transforming them into profitable businesses shipping commercial quantities of product. Under the performance underpin, if the Committee is not satisfied that appropriate progress has been made across the business it will have the discretion to cancel all or some of the LTIP award.

A two-year holding period will apply after the end of the performance period for Executive Directors.

ANNUAL REPORT ON REMUNERATION CONTINUED

Unaudited information continued

Statement of voting

The Company is committed to ongoing dialogue with its shareholders and takes an active interest in trying to ensure that as many shareholders as possible submit their votes in time for any shareholder meetings. The following table sets out the actual voting in respect of the resolutions to approve the Directors' remuneration report at the Company's Annual General Meeting held on January 2018 and the Directors' remuneration policy at the Company's Annual General Meeting held on 10 December 2015.

Resolution	Votes for	% for	Votes against	% against	Votes withheld
To approve the Directors' remuneration report	139,153,030	99.9	84,967	0.1	138,618
To approve the Directors' remuneration policy	109,395,766	99.8	181,769	0.2	11,681,552

Directors' contracts

Executive Directors

It is the Group's policy that Executive Directors should have contracts with an indefinite term, providing for one year's notice.

	Date of contract	Date of appointment	Notice from the Company	Notice from Director
Dr Michael Edelman	27 June 2006	27 June 2006	12 months	12 months
Dr Nigel Pickett	27 June 2006	27 June 2006	12 months	12 months
Brian Tenner	30 July 2018	20 August 2018	6 months	6 months
David Blain*	3 August 2015	3 August 2015	6 months	6 months

* David Blain stepped down as a Director on 20 August 2018.

All Directors offer themselves for re-election at each AGM in accordance with the UK Corporate Governance Code. Service contracts are available for inspection at the registered office of the Company.

	Date of letter of appointment	Date of appointment	Unexpired term of contract on 31 July 2018
Dr Christopher Richards (Chairman)	28 October 2015	11 November 2015	4 months
Brendan Cummins	19 May 2015	28 May 2015	10 months
Dr Alison Fielding	20 March 2017	20 April 2017	1 year and 9 months

Non-executive Directors

All Non-executive Directors are appointed for an initial three-year term and then on a rolling annual term. Non-executive Directors' appointments may be terminated on not less than three months' notice from either party.

On behalf of the Board

Brendan Cummins
Remuneration Committee Chairman
16 October 2018

DIRECTORS' REPORT

The Directors present their report and the audited financial statements for the Group and Parent Company for the year ended 31 July 2018.

Financial instruments

Details of the Group's financial risk management objectives and policies are disclosed in note 26 to the financial statements.

Research and development

The principal activity of the Group is research and development, a review of which is included in the Chairman's and Chief Executive Officer's statements on pages 4 to 6 and 7 to 9 respectively.

Total research and development spend was £3,960,000 (2017: £5,508,000). No development expenditure was capitalised in the period (2017: £nil) for the reasons provided in note 3(h) to the accounts.

Dividends

The Directors do not recommend payment of an ordinary dividend (2017: £nil).

Disclosures reported elsewhere in the Annual Report

The strategic review of the business of the Company and its subsidiaries is given on pages 2 to 32. Certain information required for disclosure in this report is provided in other appropriate sections of this Annual Report. These include the:

- Corporate governance report on pages 36 to 42;
- Operating review on pages 10 to 15 in respect of the Group's activities in the fields of research and development (where the outlook section covers likely future developments in the business of the Company and its subsidiaries);
- Finance review on pages 24 to 26;
- Directors' remuneration report on pages 49 to 67;
- disclosures on the Group's greenhouse gas emissions, Director and employee gender and human rights, which are included in the Sustainability report on pages 29 to 33;
- Going concern statement on page 23; and
- disclosures on financial instruments in note 26 of the notes to the consolidated financial statements.

The disclosures are, accordingly, incorporated into this report by reference.

Requirements of the Listing Rules

The following table provides references to where the information required by the Listing Rule 9.8.4R is disclosed:

Listing Rule requirement	Location
A statement of the amount of interest capitalised during the period under review and details of any related tax relief	Not applicable
Information required in relation to the publication of unaudited financial information	Not applicable
Details of any long-term incentive schemes	Directors' remuneration report, pages 49 to 67
Details of any arrangements under which a Director has waived emoluments, or agreed to waive any future emoluments, from the Company	No such waivers
Details of any non-pre-emptive issues of equity for cash	See Directors' report
Details of any non-pre-emptive issues of equity for cash by any unlisted major subsidiary undertaking	No such share allotments
Details of UK Parent participation in a placing by a listed subsidiary	No such share participations
Details of any contract of significance in which a Director is or was materially interested	No such contracts
Details of rules regarding the appointment and replacement of Directors	See Directors' remuneration report
Details of any contract of significance between the Company (or one of its subsidiaries) and a controlling shareholder	No such contracts
Details of a waiver of dividends by a shareholder	No such waivers
Board statement in respect of relationship agreement with the controlling shareholder	No such agreements

Acquisition of the Company's own shares

The Company made no purchases of its own shares in the period under review. As at 31 July 2018 the authority given by the shareholders at the 2017 Annual General Meeting is for the Company to make market purchases of up to £2,859,349.30 of the nominal value of its ordinary shares at a price per share of not less than 10 pence, and not more than 5% above the average of the middle market quotations for ordinary shares of the Company for the five business days immediately preceding the day of purchase. This authority is being proposed for renewal at the 2018 Annual General Meeting.

Share capital and funding

Following shareholder approval at a general meeting held on 14 November 2017, 47,655,821 shares were issued on 15 November 2017 as a result of a placing of shares at 18 pence each raising cash of £8.0 million net of expenses.

As at 31 July 2018 share capital comprised 285.9 million ordinary shares of 10 pence each (2017: 238.3 million). There is only one class of share and all shares are fully paid. Full details of the Group's and Company's share capital movements during the period are given in note 21 to the financial statements.

Share capital and funding continued

Pursuant to the general provisions of the Articles of Association and prevailing legislation, there are no specific restrictions on the size of a holding. The Directors are not aware of any restrictions on the transfer of ordinary shares in the Company other than certain restrictions which may from time to time be imposed by law and regulations, e.g. insider trading laws, and pursuant to the Listing Rules of the Financial Conduct Authority whereby certain employees of the Company require prior approval from the Company to deal in the Company's securities.

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

Details of shares under option are provided in note 22 to the financial statements.

Directors and their interests

The following Directors held office throughout the year:

Dr Christopher Richards

Dr Michael Edelman

Dr Nigel Pickett

David Blain (resigned 20 August 2018)

Brian Tenner (appointed 20 August 2018)

Brendan Cummins

Dr Alison Fielding

Keith Wiggins (resigned 10 June 2018)

Biographies of the Directors at the date of this report can be found on pages 34 and 35.

Details of Directors' remuneration are shown in the Directors' remuneration report on pages 49 to 67.

Directors' interests in the shares of the Company, including family and beneficial interests, at 31 July 2018 were:

	Ordinary shares of 10p each			
	31 July 2018 Number	**31 July 2018 %**	31 July 2017 Number	31 July 2017 %
Dr Christopher Richards	**285,496**	**0.10**	118,830	0.05
Dr Michael Edelman	**3,124,350**	**1.09**	4,931,615	2.07
Dr Nigel Pickett	**11,112,347**	**3.89**	10,945,681	4.59
David Blain	**153,588**	**0.05**	14,700	0.01
Brendan Cummins	**277,777**	**0.10**	–	–
Dr Alison Fielding	**–**	**–**	–	–
	14,953,558	**5.23**	16,010,826	6.72

As at 31 July 2018, none of the Directors had any interests in shares of any other Group company.

No Director had an interest in any contract that was significant in relation to the Group's business at any time during the period.

Directors are subject to re-election at intervals of not more than three years.

Directors' indemnity insurance

The Group has maintained insurance throughout the year for its Directors and officers against the consequences of actions brought against them in relation to their duties for the Group. Such provision remains in force as at the date of approval of the Directors' report.

Substantial shareholders

The Company is aware that the following had an interest in 3% or more of the issued ordinary share capital of the Company at 31 July 2018:

	Number of ordinary shares at 31 July 2018	**% of issued share capital**
Lombard Odier	**56,783,141**	**19.86**
Hargreaves Lansdown Asset Management	**24,279,717**	**8.49**
Miton Asset Management	**16,735,185**	**5.85**
Baillie Gifford & Co	**15,889,617**	**5.56**
Dr Nigel Pickett	**11,112,347**	**3.89**
Interactive Investor	**10,756,665**	**3.76**

By 12 October 2018 the following parties had notified the Company that their shareholdings had changed since 31 July 2018 – Lombard Odier (18.89%) and Prudential plc (5.4%). Apart from the foregoing, there were no other notified significant changes in the holdings between 31 July 2018 and the date the Annual Report and Accounts were signed.

Donations

No charitable or political donations were made in the year (2017: £nil).

Additional information for shareholders

With regard to the appointment and replacement of Directors, the Company is governed by its Articles of Association, the UK Corporate Governance Code 2016, the Companies Act 2006 and related legislation.

The Articles themselves may be amended by special resolution of the shareholders. The Articles provide that Directors may be appointed by an ordinary resolution of the Company's members or by a resolution of the Directors, provided that, in the latter instance, a Director appointed in this way retires and stands for election at the first Annual General Meeting following his appointment.

The Articles also provide that at every Annual General Meeting at least one-third of the Directors retire by rotation and set out the circumstances in which and how they may be re-elected. The Company's members may remove a Director by passing an ordinary resolution of which special notice has been given. The office of a Director shall be vacated in any of the following events: (a) if (but in the case of a Director holding any executive office subject to the terms of any contract of service between him and the Company) notification in writing, signed by the Director or otherwise authenticated in such manner as the other Directors may accept, is received by the Company from the Director that he is resigning or retiring from office as a Director, and such resignation or retirement has taken effect in accordance with its terms, or if he shall in writing offer to resign or retire and the Directors shall resolve to accept such offer; (b) if he becomes bankrupt or has a receiving order made against him or makes any arrangement or composition with his creditors generally in satisfaction of his debts or shall apply to the court for an interim order under section 253 of the Insolvency Act 1986; (c) if a registered medical practitioner who is treating the Director gives a written opinion to the Company stating that he has become physically or mentally incapable of acting as a Director and may remain so for more than three months; (d) if he is absent from meetings of the Directors for six successive months without leave, and his alternate Director (if any) shall not during such period have attended in his stead, and the Directors resolve that his office be vacated; (e) if he shall be removed from office by notice in writing served upon him signed by all his co-Directors, but so that if he holds an appointment to an executive office which automatically determines as a result, such removal shall be deemed an act of the Company and shall have effect without prejudice to any claim for damages for breach of any contract of service between him and the Company; or (f) if he ceases to be a Director by virtue of any provision of the Companies Act or becomes prohibited by law from being a Director.

The powers of the Directors are determined by applicable legislation and the Company's Articles of Association. As provided in those Articles, the Directors may exercise all the Company's powers provided that the Articles or applicable legislation do not stipulate that any such powers must be exercised by the Company's members. The Directors have been authorised to issue and allot ordinary shares, pursuant to the Articles and have authority to make market purchases of shares. These powers are referred to shareholders at each Annual General Meeting for renewal. Any shares purchased may be cancelled or held as treasury shares.

Employment policies

The Group is committed to ensuring the health and safety of its employees in the workplace. This includes the provision of regular medical checks.

The Group supports the employment of disabled people where possible through recruitment, by retention of those who become disabled and generally through training, career development and promotion.

The Group is committed to keeping employees as fully informed as possible with regard to the Group's performance and prospects and seeks their views, wherever possible, on matters which affect them as employees.

Compliance with the UK Corporate Governance Code

The statements of compliance with the principles of the UK Corporate Governance Code published by the FRC in 2016 are set out on page 37.

Foreign branches

The Group has just one foreign location, a subsidiary in the United States, which provides management services to the UK business.

Issue of share capital

Following shareholder approval at a general meeting held on 14 November 2017, 47,655,821 shares were issued on 15 November 2017 as a result of a placing of shares at 18 pence, each raising cash of £8.0 million net of expenses.

Auditor

Ernst & Young LLP has indicated its willingness to continue in office.

Ordinary resolutions to re-appoint Ernst & Young LLP as auditor and to authorise the Directors to agree its audit fee will be proposed at the forthcoming Annual General Meeting. The audit is out to tender at present and if the process completes in advance of the Annual General Meeting and a different auditor is appointed then, if possible, ordinary resolutions to appoint the new auditor and to authorise the Directors to agree its audit fee will be proposed at the forthcoming Annual General Meeting. If a new auditor is appointed after the notice of the Annual General Meeting then the new auditor will be voted on by the shareholders at the next Annual General Meeting.

Annual General Meeting notice

The Annual General Meeting of the Company will be held on 13 December 2018 at 11.00am, at the Company's headquarters at 46 Grafton Street, Manchester M13 9NT. The notice convening the AGM, together with an explanation of the resolutions to be proposed at the meeting, will be sent to shareholders separately from this document.

On behalf of the Board

Dr Michael Edelman
Chief Executive Officer
16 October 2018

STATEMENT OF DIRECTORS' RESPONSIBILITIES

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

Company law requires the Directors to prepare Group financial statements for each financial year. Under that law, the Directors are required to prepare Group financial statements under IFRSs as adopted by the European Union.

Under company law the Directors must not approve the Group financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and of the profit or loss of the Group for that period. In preparing the Group financial statements the Directors are required to:

- present fairly the financial position, financial performance and cash flows of the Group;
- select suitable accounting policies in accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors and then apply them consistently;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- make judgements that are reasonable;
- provide additional disclosures when compliance with the specific requirements in IFRSs as adopted by the European Union is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Group's financial position and financial performance; and
- state whether the Group financial statements have been prepared in accordance with IFRSs as adopted by the European Union, subject to any material departures disclosed and explained in the financial statements.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's transactions and disclose with reasonable accuracy at any time the financial position of the Group and enable them to ensure that the Group financial statements comply with the Companies Act 2006 and Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are also responsible for preparing the Directors' report, the Directors' remuneration report and the Corporate governance statement in accordance with the Companies Act 2006 and applicable regulations, including the requirements of the Listing Rules and the Disclosure Guidance and Transparency Rules.

The financial statements for the year ended 31 July 2018 are included in the 2018 Annual Report, which is published by the Company in hard copy printed form and available to download on the Group's website on the internet. The maintenance and integrity of the Nanoco website is the responsibility of the Directors; the work carried out by the auditor does not involve consideration of these matters and, accordingly, the auditor accepts no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' remuneration

The Directors' remuneration report on pages 49 to 67 sets out the remuneration policies operated by the Company and disclosures on Directors' remuneration and other disclosable information relating to Directors and officers and their interests.

Internal control

The Board, through the Audit Committee, has reviewed the assessment of risks and the internal control framework that Nanoco operates and has considered the effectiveness of the system of internal control in operation in the Group for the year covered by this report and up to the date of its approval by the Board of Directors. The Board has concluded that, given the size of the organisation, appropriate controls have been established and complied with.

The UK Corporate Governance Code

The Board considers that the Company applies the principles of the UK Corporate Governance Code of the Financial Reporting Council, as described under "Corporate governance" on pages 36 to 42, and has complied with all relevant principles and provisions of the Code. We did not comply with the requirement in E.2.4 to give 14 clear working days' notice of the general meeting we held on 14 November 2017. The reason for the non-compliance was the desire to conclude the meeting as early as possible as completion of the fundraising had a direct impact on the publication of the Company's preliminary results announcement and its report and accounts for the year ended 31 July 2017 as the proceeds of the fundraising were relevant in assessing the going concern status of the Company. The Directors strongly believed that it was in the best interests of the Company for the going concern status of the Company to be secured prior to the publication of the Company's preliminary results announcement and its Annual Report and Accounts for the year ended 31 July 2017, which were required to be published by 30 November 2017. As required by the Listing Rules of the Financial Conduct Authority, the auditor has considered the Directors' statement of compliance in relation to those points of the Code which are specified for their review.

The Directors consider that the Annual Report and financial statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's and the Group's performance, business model and strategy.

STATEMENT OF DIRECTORS' RESPONSIBILITIES CONTINUED

Auditor

Each of the persons who is a Director at the date of approval of this Annual Report confirms that:

- so far as the Director is aware, there is no relevant audit information of which the Group's auditor is unaware; and
- the Director has taken all the steps that he or she ought to have taken as a Director in order to make himself or herself aware of any 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.

Ernst & Young LLP has expressed its willingness to continue in office as auditor and a resolution to re-appoint them will be proposed at the forthcoming Annual General Meeting. A stated earlier, the audit is subject to a tender process at present.

Directors' responsibility statement

In accordance with the FCA's Disclosure Guidance and Transparency Rules, the Directors listed on pages 34 and 35 confirm, to the best of their knowledge, that:

1. the financial statements have been prepared in accordance with IFRSs 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 management report, which is incorporated into the Directors' report, includes 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.

Annual Report

The Annual Report for the year ended 31 July 2018, comprising the Strategic report, the Directors' remuneration report, the Directors' report, the financial statements and additional information for investors, has been approved by the Board of Directors.

By order of the Board

Brian Tenner
Company Secretary
16 October 2018

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF NANOCO GROUP PLC

Opinion

In our opinion:

- Nanoco Group plc's group financial statements and parent company financial statements ("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 July 2018 and of the group's loss for the year then ended;
- the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006, and, as regards the group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements of Nanoco Group plc which comprise:

Group	Parent company
Consolidated statement of comprehensive income for the year then ended	Statement of changes in equity for the year then ended
Consolidated statement of changes in equity for the year then ended	Statement of financial position as at 31 July 2018
Consolidated statement of financial position as at 31 July 2018	Cash flow statement for the year then ended
Consolidated cash flow statement for the year then ended	Related notes 1 to 28 to the financial statements
Related notes 1 to 28 to the financial statements	

The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards ("IFRSs") as adopted by the European Union and, as regards the parent company financial statements, as applied in accordance with the provisions 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 below. 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.

Material uncertainty related to going concern

We draw attention to note 2c in the financial statements, which indicates that the Group's ability to implement cost savings within the necessary timeframe as identified in the downside case may cast significant doubt on the entity's ability to continue as a going concern. As stated in note 2c, these events or conditions, along with the other matters as set forth in note 2c, indicate that a material uncertainty exists that may cast significant doubt on the company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Conclusions relating to principal risks, going concern and viability statement

Aside from the impact of the matter disclosed in the material uncertainty related to going concern section, we have nothing to report in respect of the following information in the annual report, in relation to which the ISAs(UK) require us to report to you whether we have anything material to add or draw attention to:

- the disclosures in the annual report set out on pages 18 to 21 that describe the principal risks and explain how they are being managed or mitigated;
- the directors' confirmation set out on page 18 in the annual report that they have carried out a robust assessment of the principal risks facing the entity, including those that would threaten its business model, future performance, solvency or liquidity;
- whether the directors' statement in relation to going concern required under the Listing Rules in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit; or
- the directors' explanation set out on pages 22 and 23 in the annual report as to how they have assessed the prospects of the entity, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the entity will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Overview of our audit approach

Key audit matters	• Revenue recognition – occurrence and measurement of revenue under development agreements • Material uncertainty relating to going concern • Carrying value of intellectual property and tangible fixed assets
Audit scope	• The Group comprises two components based on geographical location, being the UK and US. • We performed an audit of the complete financial information of the UK component and audit procedures on specific balances of the US component. • These two components accounted for 100% of operating expenses, 100% of revenue, 100% of loss before taxation and 100% of total assets.
Materiality	• Overall group materiality of £184,000, which represents 2% of operating expenses.

Key audit matters

Key audit matters are those matters that, in our professional judgement, 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) that we identified. These matters included 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 our opinion thereon, and we do not provide a separate opinion on these matters.

In addition to the matter described in the material uncertainty related to going concern section, we have determined the matters described below to be the key audit matters to be communicated in our report.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Revenue recognition – occurrence and measurement of revenue under development agreements (rendering of services £2,963,000) (2017: £241,000) *Refer to the Audit Committee report (pages 45 to 48); accounting policies (pages 85 to 90); and note 4 of the Consolidated financial statements (page 90).* All revenue streams are susceptible to manipulation by management in order to improve reported performance or success. Supply, licence and development agreements with customers can be significant in delivering the group's revenue during its pre-commercialisation phase. In the current year, the group has entered into a development agreement with a new customer, which contributes a significant proportion of overall revenue. There is a risk of inappropriate recognition and measurement of revenue if the identification of one or more components of revenue is not consistent with the economic substance of the development agreement and the measurement of the stages of completion does not reflect the work performed. Inappropriate judgements applied by management could result in material misstatement in the income statement. In the prior year the risk relating to the occurrence of revenue included revenue from products sold and revenue under licence agreements. In the current year the amount of revenue from each of these sources was not material.	We understood and assessed the design and implementation of the key controls around the revenue recognition and measurement process. We did not seek to obtain reliance on the control framework. We obtained and reviewed the new development agreement and associated Statements of Work to understand the nature of each transaction. This consisted primarily of an analysis of the contractual terms of the agreement and inquiries of technical project managers to obtain an understanding of the substance of performance milestones and contractual payments received against the criteria and guidance within IAS18. In particular, we assessed whether the milestones and payments received represented separate components of revenue; we concluded that each transaction represented a single continuous service. We made inquiries of technical project managers on the extent of work performed and compared it to the assumptions used by the management in determining the stage of completion of the services under each Statement of Work. We agreed invoiced amounts to contract terms and receipt of payment and, as applicable, to evidence of the achievement of any performance obligations under the contract. We tested adjustments recorded in revenue, such as releases of deferred licence revenue, for evidence of management bias or override of controls. We read minutes of Board meetings and other committee meetings for evidence of changes in contractual terms in existing agreements.	Based on the procedures performed, we concluded that the judgement relating to the provision of a single service under the new development agreement was consistent with the economic substance of the transaction. Based on the procedures performed, we did not identify any evidence of material misstatement in the revenue recognised in the year.

Key audit matters continued

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Carrying value of intellectual property (£3,432,000; 2017: £2,619,000) and tangible fixed assets (£2,604,000; 2016: £865,000) *Refer to the accounting policies (pages 85 to 90); note 11 (page 93); note 12 (page 94) and note 13 (page 94).* At 31 July 2018 the carrying value of the group's non-current assets, was £6.0 million (2017: £3.5 million). The group's operating loss for the year then ended was £7.4 million (2017: £10.9 million). There is a risk that the carrying value of the group's non-current assets might not be recoverable. No impairment losses have been recorded in the year ended 31 July 2018 (2017: £77,000). Assets held for sale at 31 July 2017 with a carrying value of £535,000 were reclassified as tangible fixed assets during the year. Any inappropriate judgements in measuring the recoverable amount of the non-current assets could result in a material misstatement in the consolidated statement of comprehensive income and in the statement of financial position. This risk area is consistent with the prior year except that there are no assets currently held for sale.	We understood and assessed the design and implementation of the key controls around management's assessment of the carrying value of intellectual property and tangible fixed assets. We did not seek to obtain reliance on the control framework. We tested the completeness of management's impairment review by reading Board minutes and minutes of other committee meetings, making inquiries of management regarding the registration and protection of patents and checking for consistency with other judgements such as going concern and capitalisation of development costs and our understanding of the company's licence and development agreements. We tested the patent registration costs that were capitalised during the year to supporting invoices. We obtained the financial forecasts prepared by management and tested the integrity of the forecasts, ensured consistency with the budget approved by the board and those forecasts used in the going concern assessment and that the calculation of value in use had been performed in accordance with the accounting framework. We made inquiries of management to identify tangible and intangible fixed assets that relate solely to manufacturing activities which would be reorganised under management's downside going concern scenario where cash generating revenues do not materialise. We performed sensitivity analysis to evaluate the impact on the value in use if cash generating revenues do not materialise. We found that the calculated value in use, when adjusted for reasonable changes in assumptions, was less than the carrying value of the non-current assets as the calculation did not include an estimate of the realisable value of the assets, including intellectual property, at the end of the forecast period. Therefore, we also obtained evidence that the fair value less cost of disposal of the Group's non-current assets, including intellectual property, was not less than their carrying amount. This evidence consisted of existing licence agreements, the company's own purchase of intellectual property assets in 2017 and purchases of similar intellectual property by other market participants. We also reviewed for changes in the company's market capitalisation and considered the success of the placing of shares in November 2017 for indicators that the fair value less cost of disposal of the non-current assets had reduced during the period.	We concluded that we agreed with management's judgement that the recoverable amount of the non-current assets of the group held at 31 July 2018 was not less than their carrying value and that no impairment provision is required.

An overview of the scope of our audit

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the group. Taken together, this enables us to form an opinion on the consolidated financial statements. We take into account size, risk profile, the organisation of the group and effectiveness of group-wide controls and changes in the business environment when assessing the level of work to be performed at each entity.

The group's subsidiaries are described in note 14 to the financial statements. We view the group as having two components based on geographical location, being the UK and US. The group's processes and controls are consistent across the group and lie primarily in one location, Manchester, with responsibility being with group management for the preparation of financial information and for judgemental processes and significant risk areas. The US-based subsidiary predominantly provides management and technical expertise to the group.

In assessing the risk of material misstatement to the group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, we performed full scope audit procedures in respect of the UK component. For the US component we performed specific scope audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile. This was consistent with the approach that we followed in the previous year.

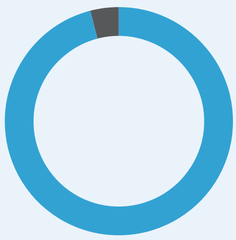
An overview of the scope of our audit continued

Tailoring the scope continued

The reporting components where we performed audit procedures accounted for 100% (2017: 100%) of the group's operating expenses, 100% (2017: 100%) of the group's revenue, 100% (2017: 100%) of loss before taxation and 100% (2017: 100%) of the group's total assets. For the current year, the full scope component contributed 96% (2017: 96%) of the group's operating expenses, 100% (2017: 100%) of the group's revenue and 100% (2017: 100%) of the group's total assets. The specific scope component contributed 4% (2017: 4%) of the group's operating expenses, 0% (2017: 0%) of the group's revenue and 0% (2017: 0%) of the group's total assets. The audit scope of this component may not have included testing of all significant accounts of the component but will have contributed to the coverage of significant accounts tested for the group.

The charts below illustrate the coverage obtained from the work performed by our audit teams.

OPERATING EXPENSES

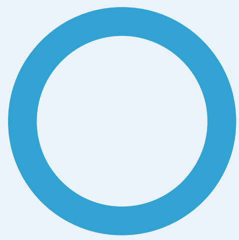


96% full scope components
4% specific scope components

REVENUE

100% full scope components
0% specific scope components

TOTAL ASSETS



100% full scope components
0% specific scope components

Involvement with component teams

All audit work performed for the purposes of the audit was undertaken by the group audit team.

Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality

The magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the group to be £184,000 (2017: £216,000), which is 2% (2017: 2%) of adjusted operating expenses, which we measured using the basis described in the table below. It was considered inappropriate to calculate materiality using group profit before tax due to the loss-making position of the group. It was also considered inappropriate to use revenue to calculate materiality as revenue reported by the group relates to its pre-commercialisation activities. Adjusted operating expenses, which exclude non-cash depreciation, amortisation and share based payment expenses, represent a measure of the rate at which the group is using its cash resources in reaching its strategic objective of commercialising its technology. We therefore considered adjusted operating expenses to be the most appropriate performance metric on which to base our materiality calculation as we believe that it continues to be the most relevant performance measure to the stakeholders of the entity in their use of the financial statements.

STARTING BASIS	• Research and development expenses of £3,960,000 (2017: £5,508,000) • Administrative expenses of £6,468,000 (2017: £6,784,000)

ADJUSTMENTS	• Excluding non-cash items as they do not relate to the Group's utilisation of cash resources:
	  • Depreciation – decrease basis by £504,000 (2017: £741,000)
	  • Amortisation – decrease basis by £476,000 (2017: £405,000)
	  • Impairment expense – decrease basis by £nil (2017: £77,000)
	  • Share-based payments – decrease basis by £257,000 (2017: £242,000)

MATERIALITY	• Totals £9,191,000 adjusted operating expenses (2017: £10,827,000) • Materiality of £184,000 (2% of adjusted operating expenses) (2017: £216,000; 2%)

Our initial materiality was based on forecast adjusted operating expenses. We reassessed initial materiality as actual adjusted operating expenses were higher than forecast adjusted operating expenses.

We determined materiality for the parent company to be £774,000 (2017: £1,192,000), which is 1% (2017: 1%) of total assets. Total assets was used to calculate materiality as this represents the amount of cash that has been invested in, or lent to, its subsidiaries while they commercialise their technology. The materiality for the parent company is greater than the group reflecting the different basis, however for the purposes of the group audit a lower performance materiality was allocated.

Our application of materiality continued

Performance materiality

The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the group's overall control environment, our judgement was that performance materiality was 50% (2017: 50%) of our planning materiality, namely £92,000 (2017: £108,000). Our objective in adopting this approach was to ensure that total uncorrected and undetected audit differences in all accounts did not exceed our materiality level.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was £18,000 to £87,000 (2017: £22,000 to £103,000).

Reporting threshold

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of £9,200 (2017: £10,800), which is set at 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Other information

The other information comprises the information included in the annual report set out on pages 1 to 72, including the strategic report, the corporate governance statement, the Remuneration Committee report, the Directors' remuneration report, the Audit Committee report, the Nomination Committee report, the Directors' report and the Statement of Directors' responsibilities set out on pages 71 and 72, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, 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 audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

In this context, we also have nothing to report in regard to our responsibility to specifically address the following items in the other information and to report as uncorrected material misstatements of the other information where we conclude that those items meet the following conditions:

- **Fair, balanced and understandable set out on page 72 –** the statement given by the directors that they consider the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the group's performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- **Audit committee reporting set out on page 45 –** the section describing the work of the audit committee does not appropriately address matters communicated by us to the audit committee is materially inconsistent with our knowledge obtained in the audit; or
- **Directors' statement of compliance with the UK Corporate Governance Code set out on page 37 –** the parts of the directors' statement required under the Listing Rules relating to the company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

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 its 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 set out on pages 71 and 72, the directors are responsible for the preparation of the 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 financial statements, the directors are responsible for assessing the group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless 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.

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.

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud

The objectives of our audit, in respect to fraud, are: to identify and assess the risks of material misstatement of the financial statements due to fraud; to obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement due to fraud, through designing and implementing appropriate responses; and to respond appropriately to fraud or suspected fraud identified during the audit. However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management.

Our approach was as follows:

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the group and determined that the most significant are the UK Companies Act 2006, the UK Corporate Governance Code and the UK Listing Rules.
- We understood how Nanoco Group plc is complying with those frameworks by the oversight of those charged with governance (i.e. considering the potential for override of controls or other inappropriate influence over the financial reporting process, such as efforts by management to manage earnings in order to influence the perceptions of analysts as to the entity's performance and profitability), the culture of honesty and ethical behaviour and whether a strong emphasis is placed on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which could persuade individuals not to commit fraud because of the likelihood of detection and punishment.
- We assessed the susceptibility of the group's financial statements to material misstatement, including how fraud might occur by misreporting of revenue, management's journal entries or bias in the use of judgements and estimates.
- Based on this understanding we designed our audit procedures to identify non-compliance with such laws and regulations. Our procedures involved making enquiries of the group's legal advisers, reading the minutes of the Board of Directors and Audit Committee, testing manual journal entries and testing estimates for unexpected changes in assumptions.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at https://www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Other matters we are required to address

- We were appointed by management on 13 August 2008 to audit the financial statements of the company for the year ending 31 July 2008 and subsequent financial periods. Our appointment was subsequently ratified at the annual general meeting of the company.
- The period of total uninterrupted engagement including previous renewals and reappointments is 11 years, covering the years ending 2008 to 2018. Within this time period, the initial year was prior to the company's shares being listed.
- 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 the audit.
- The 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.

Jennifer Hazlehurst
(Senior statutory auditor)
for and on behalf of Ernst & Young LLP, Statutory Auditor
Manchester
16 October 2018

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 JULY 2018

	Notes	2018 £'000	2017 £'000
Revenue	4	**3,315**	1,326
Cost of sales		**(432)**	(257)
Gross profit		**2,883**	1,069
Other operating income	5	**136**	281
Operating expenses			
Research and development expenses		**(3,960)**	(5,508)
Administrative expenses		**(6,468)**	(6,784)
Operating loss	6	**(7,409)**	(10,942)
– before share-based payments		**(7,152)**	(10,700)
– share-based payments	22	**(257)**	(242)
Finance income	8	**11**	44
Finance expense	8	**(7)**	–
Loss before taxation		**(7,405)**	(10,898)
Taxation	9	**1,400**	1,788
Loss after taxation		**(6,005)**	(9,110)
Other comprehensive income			
Loss on exchange rate translations		**(13)**	–
Loss after taxation for the year and total comprehensive loss for the year		**(6,018)**	(9,110)
Loss per share			
Basic and diluted loss for the year	10	**(2.21)p**	(3.82)p

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.

The notes on pages 83 to 104 form an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 JULY 2018

Group	Issued equity capital £'000	Share-based payment reserve £'000	Merger reserve £'000	Retained earnings £'000	Total £'000
At 31 July 2016	58,057	2,715	(1,242)	(40,767)	18,763
Loss for the year and total comprehensive loss for the year	–	–	–	(9,110)	(9,110)
Issue of share capital on exercise of options (note 21)	552	–	–	–	552
Share-based payments	–	242	–	–	242
At 31 July 2017	58,609	2,957	(1,242)	(49,877)	10,447
Loss for the year	–	–	–	(6,005)	(6,005)
Other comprehensive income	–	–	–	(13)	(13)
Total comprehensive loss	–	–	–	(6,018)	(6,018)
Issue of share capital on placing (note 21)	8,578	–	–	–	8,578
Costs of placing	(629)	–	–	–	(629)
Share-based payments	–	257	–	–	257
At 31 July 2018	**66,558**	**3,214**	**(1,242)**	**(55,895)**	**12,635**

COMPANY STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 JULY 2018

Company	Issued equity capital £'000	Share-based payment reserve £'000	Capital redemption reserve £'000	Retained earnings £'000	Total £'000
At 31 July 2016	135,925	2,715	4,402	(25,125)	117,917
Profit for the year and total comprehensive profit for the year	–	–	–	30	30
Issue of share capital on exercise of options (note 21)	552	–	–	–	552
Share-based payments	–	242	–	–	242
At 31 July 2017	136,477	2,957	4,402	(25,095)	118,741
Loss for the year and total comprehensive profit for the year	–	–	–	(50,025)	(50,025)
Issue of share capital on placing (note 21)	8,578	–	–	–	8,578
Costs of placing	(629)	–	–	–	(629)
Share-based payments	–	257	–	–	257
At 31 July 2018	**144,426**	**3,214**	**4,402**	**(75,120)**	**76,922**

STATEMENT OF FINANCIAL POSITION AT 31 JULY 2018

Registered no. 05067291

	Notes	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
Assets					
Non-current assets					
Tangible fixed assets	11	**2,604**	**–**	865	–
Intangible assets	12	**3,432**	**–**	2,619	–
Investment in subsidiaries	14	**–**	**66,821**	–	66,564
		6,036	**66,821**	3,484	66,564
Current assets					
Inventories	15	**217**	**–**	188	–
Trade and other receivables	16	**1,415**	**10,508**	669	47,957
Income tax asset		**1,400**	**–**	1,837	–
Cash and cash equivalents	17	**10,729**	**43**	5,706	4,670
		13,761	**10,551**	8,400	52,627
Assets held for sale	13	**–**	**–**	535	–
Total assets		**19,797**	**77,372**	12,419	119,191
Liabilities					
Current liabilities					
Trade and other payables	18	**3,020**	**–**	1,318	–
Deferred revenue	20	**400**	**–**	102	–
		3,420	**–**	1,420	–
Non-current liabilities					
Financial liabilities	19	**407**	**450**	–	450
Deferred revenue	20	**3,335**	**–**	552	–
		3,742	**450**	552	450
Total liabilities		**7,162**	**450**	1,972	450
Net assets		**12,635**	**76,922**	10,447	118,741
Capital and reserves					
Issued equity capital	21	**66,558**	**144,426**	58,609	136,477
Share-based payment reserve	22	**3,214**	**3,214**	2,957	2,957
Merger reserve	23	**(1,242)**	**–**	(1,242)	–
Capital redemption reserve	23	**–**	**4,402**	–	4,402
Retained earnings	24	**(55,895)**	**(75,120)**	(49,877)	(25,095)
Total equity		**12,635**	**76,922**	10,447	118,741

The Parent Company's result for the period ended 31 July 2018 was a loss of £50,025,000 (2017: profit of £30,000). There were no other recognised gains or losses in either the current or prior year.

Approved by the Board and authorised for issue on 16 October 2018.

The notes on pages 83 to 104 form an integral part of these financial statements.

Dr Michael Edelman
Director
16 October 2018

Mr Brian Tenner
Director
16 October 2018

CASH FLOW STATEMENTS FOR THE YEAR ENDED 31 JULY 2018

	Notes	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
(Loss)/profit before tax		**(7,405)**	**(50,025)**	(10,898)	30
Adjustments for:					
Net finance income	8	**(4)**	**–**	(44)	(30)
Loss on exchange rate translations		**(13)**	**–**	–	–
Depreciation of tangible fixed assets	11	**504**	**–**	741	–
Amortisation of intangible assets	12	**476**	**–**	482	–
Impairment of Intercompany receivable	16	**–**	**50,000**	–	–
Share-based payments	22	**257**	**–**	242	–
Changes in working capital:					
(Increase)/decrease in inventories		**(29)**	**–**	20	–
(Increase)/decrease in trade and other receivables		**(746)**	**–**	1,365	–
Increase/(decrease) in trade and other payables		**1,702**	**–**	(1,125)	–
Increase/(decrease) in deferred revenue	20	**3,081**	**–**	(525)	–
Cash outflow from operating activities		**(2,177)**	**(25)**	(9,742)	–
Research and development tax credit received		**1,837**	**–**	2,000	–
Overseas corporation tax paid		**–**	**–**	(79)	–
Net cash outflow from operating activities		**(340)**	**(25)**	(7,821)	–
Cash flow from investing activities					
Purchases of tangible fixed assets	11	**(2,215)**	**–**	(374)	–
Purchases of intangible fixed assets	12	**(782)**	**–**	(1,185)	–
Intercompany loans to a subsidiary		**–**	**(12,551)**	–	(4,980)
Decrease in cash placed on deposit	17	**–**	**–**	5,000	5,000
Interest received		**11**	**–**	55	41
Net cash (outflow)/inflow from investing activities		**(2,986)**	**(12,551)**	3,496	61
Cash flow from financing activities					
Proceeds from placing of ordinary share capital		**8,578**	**8,578**	552	552
Costs of placing		**(629)**	**(629)**	–	–
Issue of convertible loan note	19	**400**	**–**	–	–
Loan repayment		**–**	**–**	(32)	–
Net cash inflow from financing activities		**8,349**	**7,949**	520	552
Increase/(decrease) in cash and cash equivalents		**5,023**	**(4,627)**	(3,805)	613
Cash and cash equivalents at the start of the year		**5,706**	**4,670**	9,511	4,057
Cash and cash equivalents at the end of the year	17	**10,729**	**43**	5,706	4,670

The notes on pages 83 to 104 form an integral part of these financial statements.

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 46 Grafton Street, Manchester M13 9NT.

These Group financial statements 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 2018.

The financial statements of Nanoco Group plc and its subsidiaries (the "Group") for the year ended 31 July 2018 were authorised for issue by the Board of Directors on 16 October 2018 and the statements of financial position were signed on the Board's behalf by Dr Michael Edelman.

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 financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("IFRSs") and IFRS Interpretations Committee ("IFRIC") interpretations as they apply to the financial statements of the Group for the year ended 31 July 2018.

(b) Basis of measurement

The Parent Company and Group financial statements have been prepared on the historical cost basis. There were no assets or liabilities that were measured at fair value at 31 July 2018.

(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 are set out on pages 2 to 13. The principal risks and uncertainties are shown on pages 18 to 21 while the Group's financial position is described in the Financial review on pages 24 to 26. Furthermore, note 26 summarises the Group's financial risk management objectives, policies and processes. The Group funds its day-to-day cash requirements from existing cash reserves (as is common with businesses at a similar stage of development, the Group does not currently have access to any debt facilities).

For the purposes of their going concern assessment and the basis for the preparation of the 2018 Annual Report, the Directors have reviewed the same trading and cash flow forecasts and sensitivity analyses that were used by the Group in the viability assessment noted earlier in this report. The same base case and downside sensitivities were also used.

The base case represents the Board's current expectations. The key assumptions underpinning the base case are:

- commercial production levels of nano-materials from Runcorn do not commence until the second half of calendar year 2019 (that is, the financial year ending July 2020);
- cash-generating revenue from display, lighting and other business lines is limited to contractual amounts already agreed in royalty and licence agreements and in grant awards. While the Group continues discussions with a number of potential display customers, in the interests of being conservative none are assumed to come to fruition during the forecast period;
- revenue-generating milestones already under contract are assumed to be achieved as good progress has already been made on these. In addition, new research service income is assumed to be generated based on active discussions and some additional new milestones under negotiation; and
- the Group's variable costs grow in line with manufacturing activities while the fixed overhead base is held broadly flat on 2018.

The base case produces a cash flow forecast that demonstrates that the Group has sufficient cash throughout the period of the forecast. The Group also has a medium-term goal to achieve self-sustaining levels of cash flows.

However, the Board acknowledges that there is a risk that some or all of these non-contracted projects may not convert to sales during the forecast period. Accordingly, the Board has identified a downside scenario in which no revenue, except that already under contract, is achieved during the period. This was considered in addition to the base case in assessing the going concern status of the business. The downside scenario could arise from a number of possible causes which include, but are not limited to, changes in key customers' supply chains, the replacement of the Group as a supplier of nano-materials, the expansion of the Runcorn facility falling short of its design specifications or the failure of our materials to meet customers' technical specifications.

In the downside scenario, the Group's cash resources would run out in the third quarter of calendar year 2019 if no action to reduce current costs is taken. Management has identified a series of mitigating actions, including cost savings and a reorganisation of its operations that could be undertaken in the event cash-generating revenues do not materialise. In this scenario the Group would enact its cost reduction plans in the current financial year ending 31 July 2019 with the objective of protecting the new Runcorn facility while reducing other manufacturing capabilities and indirect overheads. Management would aim to put in place sub-contract manufacturing agreements to satisfy future demand with a focus on existing licensees. While management has identified a number of cost savings, we recognise that our ability to deliver them in an appropriate timely manner could be constrained by other business activities.

2. Basis of preparation continued

(c) Going concern continued

IAS 1 Presentation of Financial Statements requires the Directors to disclose "material uncertainties related to events or conditions that may cast significant doubt upon the Group's ability to continue as a going concern". The Directors consider that the uncertainty regarding the Group's ability to implement cost savings in the downside case in the necessary timeframe meet the definition of a "material uncertainty". Nevertheless, considering the mitigating actions that can be made and after making enquiries and considering the uncertainties described above, the Directors have a reasonable expectation that the Company 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 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 (below) and to the future volatility of the future share price factor. Further information is included in note 3.

Impairment of intellectual property and tangible fixed assets

As the Group has not, to date, made a profit 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 value in use. The value in use calculation uses cash flows based on budgets that have been approved by the Directors. 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 of no further value to Nanoco and should be allowed to lapse. As a consequence, patents with a value of £nil (2017: £77,000) 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.

Impairment of investment and intercompany receivable

Judgement is required to assess the carrying value of the investment and intercompany receivable at each reporting date. Following the assessment of the carrying value of IP within the investment, and the likely repayment of the receivable by reference to discounted cash flow forecasts, management has concluded that the short-term loan of the Company to its primary trading subsidiary, Nanoco Technologies Limited, is now impaired with the carrying value impaired by £50 million (2017: £nil). The quantum of this provision will be reviewed at each reporting date.

Taxation

Management judgement is required to determine the amount of tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with an assessment of the effect of future tax planning strategies. Further information is included in note 9.

Judgements

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.

2. Basis of preparation continued

(e) Use of estimates and judgements continued

Judgements continued

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. Further information is included in note 3(d).

Assets held for sale

Judgements are required as to whether assets are still required within the business and, if not, whether they have a realisable value outwith the Group. This is particularly pertinent if a particular line of research and development is not likely to be commercialised by the Group. If such assets are identified they are separately identified within the financial statements.

Outlook

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, which have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are those relating to the estimation of the number of share options that will ultimately vest (note 22). The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

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 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 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 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).

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) Foreign currency transactions

Transactions in foreign currencies are initially recorded in the functional currency by applying the spot rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies (including those of the Group's US subsidiary) are retranslated at the functional currency rate of exchange ruling at the reporting date. All differences are taken to the consolidated statement of comprehensive income.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

(c) Segmental reporting

An operating segment is a component of an entity that engages in business activities from which it may earn revenues and incur expenses, whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. As at the reporting date the Company operated with only a single segment, being the research, development and manufacture of products and services based on high performance nanoparticles.

3. Significant accounting policies continued

(d) Revenue recognition

Revenue is recognised to the extent that it is probable that economic benefits will flow to the Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable for the sale of goods or services, excluding discounts, rebates, VAT and other sales taxes or duties.

The Group's revenues to date comprise amounts earned under joint development agreements, individual project development programmes and material supply and licence agreements and revenue from the sale of quantum dot products.

Revenues received in advance of work performed from development programmes are recognised on a straight-line basis over the period that the development work is being performed as measured by contractual milestones. Revenue is not recognised where there is uncertainty regarding the achievement of such milestones and where the customer has the right to recoup advance payments.

Cash advances from customers for the funding of capital equipment are accounted for in accordance with IFRIC 18 Transfer of Assets from Customers where the Company retains control over the related assets. The advances are taken to deferred revenue where they are expected to be repaid as a proportion of future revenue under the contract.

Contractual payments received from licence agreements are recognised as revenue when goods, services or rights and entitlements are supplied. Upfront licence fees, where control over the intellectual property has been retained by the Group, are taken to income on a straight-line basis over the initial period of the contract in accordance with the continuing obligations under the contract.

Revenue from the sale of products is recognised at the point of transfer of risks and rewards of ownership, which is generally on shipment of product.

(e) Government grants

Government grants are recognised when it is reasonable to expect that the grants will be received and that all related conditions are met, usually on submission of a valid claim for payment.

Government grants of a revenue nature are recognised as other operating income in the consolidated statement of comprehensive income.

Government grants relating to capital expenditure are deducted in arriving at the carrying amount of the asset.

(f) Cost of sales

Cost of sales comprises the labour, materials and power costs incurred in the generation of revenue from products sold and the rendering of services.

Revenue from royalties and licences, which comprise payments from customers to gain preferential treatment in terms of supply or pricing, do not have an associated cost of sale.

(g) Operating loss

Operating losses are stated after research and development and administration expenses but before finance charges and taxation.

(h) Research and development

Research costs are charged in the consolidated statement of comprehensive income as they are incurred. Development costs will be capitalised as intangible assets when it is probable that future economic benefits will flow to the Group. Such intangible assets will be amortised on a straight-line basis from the point at which the assets are ready for use over the period of the expected benefit, and will be reviewed for impairment at each reporting date based on the circumstances at the reporting date.

The criteria for recognising expenditure as an asset are:

- it is technically feasible to complete the product;
- management intends to complete the product and use or sell it;
- there is an ability to use or sell the product;
- it can be demonstrated how the product will generate probable future economic benefits;
- adequate technical, financial and other resources are available to complete the development, use and sale of the product; and
- expenditure attributable to the product can be reliably measured.

Development costs are currently charged against income as incurred since the criteria for their recognition as an asset are not met, the exception being the costs of filing and maintenance of intellectual property as these are considered to generate probable future economic benefits and are capitalised as intangible assets (see note 12).

(i) Lease payments

Rentals payable under operating leases, which are leases where the lessor retains a significant proportion of the risks and rewards of the underlying asset, are charged in the consolidated statement of comprehensive income on a straight-line basis over the expected lease term.

Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

(j) Finance income and expense

Finance income comprises interest income on funds invested and changes in the fair value of financial assets at fair value through the consolidated statement of comprehensive income. Interest income is recognised as interest accrues using the effective interest rate method.

Finance expense comprises interest expense on borrowings. All borrowing costs are recognised using the effective interest method.

3. Significant accounting policies continued

(k) Income tax

Income tax expense comprises current and deferred tax. Income tax expense is recognised in the consolidated statement of comprehensive income except to the extent that it relates to items recognised directly in equity or in other comprehensive income.

Current income tax assets (including research and development income tax credit) and liabilities for the current and prior periods are measured at the amount expected to be recovered from, or paid to, the tax authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the reporting date.

Deferred income tax is recognised on all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements with the following exceptions:

- where the temporary difference arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are measured on an undiscounted basis using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date and which are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred income tax assets are recognised to the extent that it is probable that future taxable profits will be available against which differences can be utilised. An asset is not recognised to the extent that the transfer of economic benefits in the future is uncertain.

Deferred income tax assets and liabilities are offset only if a legally enforceable right exists to set off current tax assets against current tax liabilities, the deferred income taxes relate to the same taxation authority and that authority permits the Group to make a single payment.

(l) Property, plant and equipment

Property, plant and equipment assets are recognised initially at cost. After initial recognition, these assets are carried at cost less any accumulated depreciation and any accumulated impairment losses. Cost comprises the aggregate amount paid and the fair value of any other consideration given to acquire the asset and includes costs directly attributable to making the asset capable of operating as intended.

Depreciation is computed by allocating the depreciable amount of an asset on a systematic basis over its useful life and is applied separately to each identifiable component.

The following bases and rates are used to depreciate classes of assets:

Laboratory infrastructure	–	straight line over remainder of lease period (two to ten years)
Fixtures and fittings	–	straight line over five years
Office equipment	–	straight line over three years
Plant and machinery	–	straight line over five years

The carrying values of tangible fixed assets are reviewed for impairment if events or changes in circumstances indicate that the carrying value may not be recoverable, and are written down immediately to their recoverable amount. Useful lives and residual values are reviewed annually and where adjustments are required these are made prospectively.

A tangible fixed asset item is derecognised on disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the derecognition of the asset is included in the consolidated statement of comprehensive income in the period of derecognition.

(m) Intangible assets

Intangible assets acquired either as part of a business combination or from contractual or other legal rights are recognised separately from goodwill provided they are separable and their fair value can be measured reliably. This includes the costs associated with acquiring and registering patents in respect of intellectual property rights.

Where consideration for the purchase of an intangible asset includes contingent consideration, the fair value of the contingent consideration is included in the cost of the asset.

Where intangible assets recognised have finite lives, after initial recognition their carrying value is amortised on a straight-line basis over those lives. The nature of those intangibles recognised and their estimated useful lives are as follows:

Patents	–	straight line over ten years

(n) Impairment of assets

At each reporting date the Group reviews the carrying value of its plant, equipment and intangible assets to determine whether there is an indication that these assets have suffered an impairment loss. If any such indication exists, or when annual impairment testing for an asset is required, the Company makes an assessment of the asset's recoverable amount.

An asset's recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying value of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. 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. In determining fair value less costs of disposal, an appropriate valuation model is used and these calculations are corroborated by valuation multiples or other available fair value indicators. Impairment losses on continuing operations are recognised in the consolidated statement of comprehensive income in those expense categories consistent with the function of the impaired asset.

3. Significant accounting policies continued

(n) Impairment of assets continued

An assessment is made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the recoverable amount is estimated. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. If that is the case the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the consolidated statement of comprehensive income unless the asset is carried at a revalued amount, in which case the reversal is treated as a valuation increase. After such a reversal the depreciation charge is adjusted in future periods to allocate the asset's revised carrying amount, less any residual value, on a systematic basis over its remaining useful life.

The carrying values of plant and equipment as at the reporting date have not been subjected to impairment charges.

After an extensive review during the current year no patents were identified that required further impairment. An impairment loss in the previous year in respect of intangible fixed assets is described in note 12.

(o) Assets held for sale

Non-current assets are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction, rather than through continuing use. They are measured at the lower of carrying amount and fair value less costs to sell, which are incremental costs directly attributable to the disposal of the asset. The carrying value is assessed at each reporting period.

Property, plant and equipment and intangible assets are not amortised once classified as held for sale. Assets classified as held for sale are presented separately as current assets in the statement of financial position.

(p) Investments in subsidiaries

Investments in subsidiaries are stated in the Company statement of financial position at cost less provision for any impairment.

(q) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost based on latest contractual prices includes all costs incurred in bringing each product to its present location and condition. Net realisable value is based on estimated selling price less any further costs expected to be incurred to disposal. Provision is made for slow-moving or obsolete items.

(r) Financial instruments

Financial assets and financial liabilities are recognised when the Group becomes party to the contractual provisions of the relevant instrument and derecognised when it ceases to be party to such provisions. Such assets and liabilities are classified as current if they are expected to be realised or settled within twelve months after the balance sheet date. Financial assets and liabilities are initially recognised at fair value and subsequently measured at either fair value or amortised cost including directly attributable transaction costs.

The Group has the following categories of financial assets and liabilities:

Loans and receivables

(i) Trade and other receivables

Trade receivables, which generally have 30 to 60-day terms, are recognised and carried at the lower of their original invoiced value and recoverable amount. The time value of money is not material.

Provision is made when there is objective evidence that the Group will not be able to recover balances in full. Significant financial difficulties faced by the customer, probability that the customer will enter bankruptcy or financial reorganisation and default in payments are considered indicators that the trade receivable is impaired. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying value of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in the consolidated statement of comprehensive income within administrative expenses.

When a trade receivable is uncollectable, it is written off against the allowance account for trade receivables.

(ii) Cash, cash equivalents and short-term investments

Cash and cash equivalents comprise cash at hand and deposits with maturities of three months or less. Short-term investments comprise deposits with maturities of more than three months, but no greater than twelve months.

Financial liabilities at amortised cost

(i) Trade and other payables

Trade and other payables are non-interest bearing and are initially recognised at fair value. They are subsequently measured at amortised cost using the effective interest rate method.

(ii) Loans and convertible loan notes

Obligations for loans and borrowings are measured initially at fair value and subsequently interest-bearing loans are measured at fair value. Convertible loan notes are presented as financial liabilities as rights of the note holder to convert the loan notes into equity are within the control of the Company.

(s) Share capital

Proceeds on issue of shares are included in shareholders' equity, net of transaction costs. The carrying amount is not re-measured in subsequent years.

3. Significant accounting policies continued

(t) Shares held by the Employee Benefit Trust ("EBT")

Following the exercise on 2 August 2016 upon which jointly owned shares were transferred to the sole beneficiary, there are no further shares held in the EBT. Administration of the Trust has been maintained during the current period.

(u) Share-based payments

Equity-settled share-based payment transactions are measured with reference to the fair value at the date of grant, recognised on a straight-line basis over the vesting period, based on the Company's estimate of shares that will eventually vest. Fair value is measured using a suitable option pricing model.

At each reporting date before vesting, the cumulative expense is calculated, representing the extent to which the vesting period has expired and management's best estimate of the achievement or otherwise of non-market conditions and the number of equity instruments that will ultimately vest. The movement in cumulative expense since the previous reporting date is recognised in the consolidated statement of comprehensive income, with a corresponding entry in equity.

Where the terms of an equity-settled award are modified or a new award is designated as replacing a cancelled or settled award, the cost based on the original award terms continues to be recognised over the original vesting period. In addition, an expense is recognised over the remainder of the new vesting period for the incremental fair value of any modification, based on the difference between the fair value of the original award and the fair value of the modified award, both as measured on the date of the modification. No reduction is recognised if this difference is negative.

Where awards are granted to the employees of the subsidiary company, the fair value of the awards at grant date is recorded in the Company's financial statements as an increase in the value of the investment with a corresponding increase in equity via the share-based payment reserve.

(v) Defined contribution pension scheme

The Group operates a defined contribution pension scheme. The assets of the scheme are held separately from those of the Company in an independently administered fund. The amounts charged against profits represent the contributions payable to the scheme in respect of the accounting period.

(w) New accounting standards and interpretations

The following amendments to IFRSs became mandatory in this reporting period. The Group has applied the following standards and amendments for the first time for the reporting period commencing 1 August 2017:

- Disclosure initiative – amendments to IAS 7 Statement of Cash Flows; and
- Amendments to IAS 12 Recognition of Deferred Tax Assets for Unrelieved Losses.

The adoption of these amendments did not have an impact on the current period or any prior period.

New standards not yet adopted

The IASB has published three new accounting standards relevant to the Group that will be mandatory in future periods. These standards have not been early adopted in these consolidated financial statements. The Group's initial assessment of the future impact of these new standards is as follows:

IFRS 9 Financial Instruments (effective for annual periods beginning on or after 1 January 2018)

The Group will adopt the new standard on 1 August 2018 and will not restate comparative information. Following the assessment of the impact of the standard, based on currently available information, the impairment requirements of IFRS 9, which require the Group to record expected credit losses on debt securities, loans and trade receivables on either a twelve month or lifetime basis, are likely to lead to an increase in the loss allowance.

The Group does not expect that the classification and measurement requirements of IFRS 9, in the context of the simplicity of the Group's financial instruments, will lead to a significant impact on the Group balance sheet or on its equity.

IFRS 15 Revenue from Contracts with Customers (effective for annual periods beginning on or after 1 January 2018)

The new revenue standard provides a five-step model for revenue recognition and disclosure in a framework that is designed to improve comparability of revenue amounts over a range of industries, companies and geographical boundaries. The standard can significantly change an issuer's timing of recognition of revenue, among other changes and is effective for Nanoco in the year ending 31 July 2019.

IFRS 15 requires the identification of deliverables in contracts with customers that qualify as performance obligations. The transaction price receivable from customers must be allocated between the Company's performance obligations under contracts on a relative stand-alone basis. Where goods or services sold together are concluded to be distinct performance obligations, revenue allocated to such goods or services is recognised when the control of goods passes to the customer or as the service is delivered.

Detailed reviews of revenue arrangements are underway and will continue into 2018/19 as we finalise our assessment of the impact of the new standard. Key matters arising from the assessment relate to the identification of performance obligations and determining when they are satisfied.

3. Significant accounting policies continued

(w) New accounting standards and interpretations continued

New standards not yet adopted continued

IFRS 15 Revenue from Contracts with Customers (effective for annual periods beginning on or after 1 January 2018) continued

Based on work to date we expect that one contract will be impacted by IFRS 15 in that an upfront licence fee, currently recognised over the life of the agreement (seven and a half years) under IAS 18, will be recognised over time, based on the number of units of product sold under IFRS 15, thereby deferring revenues and profits recognised under IAS 18 in the early years of the agreement.

We continue to assess the impact of the introduction of IFRS 15 on how we measure revenue for services performed under the major contract signed during the year with our US customer.

When IFRS 15 is adopted, it can be applied either on a fully retrospective basis, requiring the restatement of the comparative periods presented in the financial statements, or with the cumulative retrospective impact of IFRS 15 applied as an adjustment to equity on the date of adoption. When the latter approach is applied it is necessary to disclose the impact of IFRS 15 on each line item in the financial statements in the reporting period. A cumulative retrospective approach as modified in accordance with the standard is expected to be taken.

IFRS 16 Leases (effective for annual periods beginning on or after 1 January 2019)

The new leases standard changes the previous lease accounting model so a lessee will now reflect more assets and liabilities arising from leases on its balance sheet. This can substantially affect key financial ratios, including ratios related to debt covenants or debt-to-equity ratios.

The Group expects to recognise certain assets and liabilities (as outlined in note 25) on initial recognition of this standard, and it is expected to have an impact on the consolidated income statement and balance sheet. However, the Group only has a limited number of off-balance sheet leases classified as operating leases under current lease accounting requirements per IAS 17 Leases.

Amendments to IFRS 2 Classification and Measurement of Share-based Payment Transactions (effective for annual periods beginning on or after 1 January 2018)

The amendments are intended to eliminate diversity in practice, but are narrow in scope and address specific areas of classification and measurement. We do not anticipate the introduction of these amendments will have a material impact on our financial statements.

4. Segmental information

Operating segments

At 31 July 2018 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 Chief Executive Officer) 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 2018 £'000	31 July 2017 £'000
Analysis of revenue		
Products sold	**168**	470
Rendering of services	**3,000**	241
Royalties and licences	**147**	615
	3,315	1,326

There was one material customer who generated revenue of £3,000,000 (2017: two material customers amounting to £832,000 and £150,000).

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

	31 July 2018 £'000	31 July 2017 £'000
Revenue		
UK	**9**	167
Europe (excluding UK)	**42**	843
Asia	**176**	163
USA	**3,088**	153
	3,315	1,326

All 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 £7,405,000 (2017: £10,898,000).

5. Other operating income

	31 July 2018 £'000	31 July 2017 £'000
Government grants	**136**	213
Other income – insurance proceeds	**–**	68
	136	281

6. Operating loss

	31 July 2018 £'000	31 July 2017 £'000
Operating loss is stated after charging:		
Depreciation of tangible fixed assets (see note 11)	**504**	741
Amortisation of intangible assets (see note 12)	**476**	405
Impairment of intangible assets (see note 12)	**–**	77
Staff costs (see note 7)	**5,577**	5,947
Foreign exchange losses	**64**	43
Research and development expense*	**3,960**	5,508
Share-based payments	**257**	242
Operating lease rentals (see note 25):		
Land and buildings	**867**	733

* Included within research and development expense are staff costs totalling £3,076,000 (2017: £4,011,000) also included in note 7.

Auditor's remuneration		
Audit services:		
– Fees payable to Company auditor for the audit of the Parent and the consolidated accounts	**82**	60
– Auditing the accounts of subsidiaries pursuant to legislation	**58**	30
Fees payable to Company auditor for other services:		
– Assurance services in connection with the review of interim results	**12**	22
– Services relating to corporate finance transactions not covered above	**25**	30
Total auditor's remuneration	**177**	142

7. Staff costs

	31 July 2018 £'000	31 July 2017 £'000
Wages and salaries	**4,587**	4,947
Social security costs	**445**	453
Pension contributions	**288**	305
Share-based payments	**257**	242
	5,577	5,947
Directors' remuneration (including benefits in kind) included in the aggregate remuneration above comprised:		
Emoluments for qualifying services	**1,015**	1,071

Directors' emoluments (excluding social security costs and long-term incentives, but including benefits in kind) disclosed above include £312,000 paid to the highest paid Director (2017: £327,000). Details of the compensation of key management personnel are described in note 28.

Pension contributions into money purchase pension schemes were made for four Directors (2017: four).

Aggregate gains made by Directors during the year following the exercise of share options and jointly owned EBT shares were £nil (2017: £nil).

Not included in the costs reported above are share awards to be made to Directors under the Deferred Bonus Plan amounting to £nil (2017: £nil) which are included in the Directors' remuneration report. The awards are recognised in the income statement by way of a share-based payment charge over the deferral period as required by IFRS 2.

7. Staff costs continued

An analysis of the highest paid Director's remuneration is included in the Directors' remuneration report.

The average number of employees during the year (including Directors) was as follows:

Group	31 July 2018 Number	31 July 2017 Number
Directors	**7**	8
Laboratory and administrative staff	**79**	102
	86	110

8. Finance income and expense

Group	31 July 2018 £'000	31 July 2017 £'000
Finance income		
Interest receivable	**11**	44
Finance expense		
Loan note interest	**(7)**	–
	4	44

9. Taxation

The tax credit is made up as follows:

Group	31 July 2018 £'000	31 July 2017 £'000
Current income tax		
Research and development income tax credit receivable	**(1,400)**	(1,837)
Adjustment in respect of prior years	**–**	(30)
Overseas corporation tax	**–**	79
	(1,400)	(1,788)
Deferred tax		
Charge for the year	**–**	–
Total income tax credit	**(1,400)**	(1,788)

The adjustments in respect of prior years relate to research and development income tax credits. The research and development income tax for the year ended 31 July 2017 was submitted in May 2018 and the repayment was received in June 2018. The income tax receivable shown in the statement of financial position is the R&D tax credit receivable reported above.

The tax assessed for the year varies from the standard rate of corporation tax as explained below:

Group	31 July 2018 £'000	31 July 2017 £'000
Loss before taxation	**(7,405)**	(10,898)
Tax at standard rate of 19% (2017: 19.67%)	**(1,407)**	(2,143)
Effects of:		
Expenses not deductible for tax purposes	**3**	24
Capital allowances in excess of depreciation	**(62)**	54
Additional deduction for research and development expenditure	**(1,037)**	(1,405)
Surrender of research and development relief for repayable tax credit	**1,839**	2,492
Research and development tax credit receivable	**(1,400)**	(1,837)
Share options exercised (CTA 2009 Pt 12 deduction)	**–**	(17)
Overseas corporation tax	**–**	79
Losses and share-based payment charges carried forward not recognised in deferred tax	**669**	995
Adjustment in respect of rate changes	**(5)**	–
Adjustment in respect of prior years	**–**	(30)
Tax credit in income statement	**(1,400)**	(1,788)

9. Taxation continued

The Group has accumulated losses available to carry forward against future trading profits of £32.2 million (2017: £29.1 million).

Deferred tax liabilities/(assets) provided/(recognised) at a standard rate of 17% (2017: 17%) are as follows:

	31 July 2018 £'000	31 July 2017 £'000
Accelerated capital allowances	**407**	83
Tax losses	**(407)**	(83)
	–	–

The Group also has deferred tax assets, measured at a standard rate of 17% (2017: 17%), in respect of share-based payments of £23,000 (2017: £369,000) and tax losses of £5,486,000 (2017: £4,951,000) which have not been recognised as an asset as it is not yet probable that future taxable profits will be available against which the assets can be utilised.

10. Earnings per share

Group	31 July 2018 £'000	31 July 2017 £'000
Loss for the financial year attributable to equity shareholders	**(6,005)**	(9,110)
Share-based payments	**257**	242
Loss for the financial year before share-based payments	**(5,748)**	(8,868)
Weighted average number of shares		
Ordinary shares in issue	**271,964,590**	238,180,510
Adjusted loss per share before share-based payments (pence)	**(2.11)**	(3.72)
Basic loss per share (pence)	**(2.21)**	(3.82)

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

11. Property, plant and equipment

Group	Assets under construction £'000	Laboratory infrastructure £'000	Office equipment, fixtures and fittings £'000	Plant and machinery £'000	Total £'000
Cost					
At 1 August 2016	–	2,645	256	4,748	7,649
Additions	–	10	139	225	374
Reclassified as assets held for sale (note 13)	–	–	–	(203)	(203)
At 31 July 2017	–	2,655	395	4,770	7,820
Additions	1,391	748	44	32	2,215
Reclassified from assets held for sale (note 13)	–	–	–	203	203
At 31 July 2018	**1,391**	**3,403**	**439**	**5,005**	**10,238**
Depreciation					
At 1 August 2016	–	2,401	208	3,780	6,389
Provided during the year	–	213	55	473	741
Reclassified as assets held for sale (note 13)	–	–	–	(175)	(175)
At 31 July 2017	–	2,614	263	4,078	6,955
Provided during the year	–	12	66	426	504
Reclassified from assets held for sale (note 13)	–	–	–	175	175
At 31 July 2018	**–**	**2,626**	**329**	**4,679**	**7,634**
Net book value					
At 31 July 2018	**1,391**	**777**	**110**	**326**	**2,604**
At 31 July 2017	–	41	132	692	865

11. Property, plant and equipment continued

The aggregate original cost of tangible assets now fully depreciated but considered to be still in use is £6,790,000 (2017: £5,081,000). Assets under construction (plant and machinery) relate to the expansion of our Runcorn facility and these assets will commence to be depreciated once the plant is fully commissioned.

12. Intangible assets

Group	Patents £'000
Cost	
At 1 August 2016	3,703
Additions	1,185
Reclassified as assets held for sale (note 13)	(597)
At 31 July 2017	4,291
Additions	782
Reclassified from assets held for sale (note 13)	597
At 31 July 2018	**5,670**
Amortisation	
At 1 August 2016	1,280
Provided during the year	405
Impairment charge	77
Reclassified as assets held for sale (note 13)	(90)
At 31 July 2017	1,672
Provided during the year	476
Impairment charge	–
Reclassified from assets held for sale (note 13)	90
At 31 July 2018	**2,238**
Net book value	
At 31 July 2018	**3,432**
At 31 July 2017	2,619

Contingent consideration of $150,000 is payable in respect of a purchase of patents made during a previous period. The amount is payable if the Group reaches a revenue target in a future reporting period. The addition is recorded above at the Directors' estimate of fair value of the consideration payable.

Intangible assets are amortised on a straight-line basis over ten years. Amortisation provided during the period is recognised in administrative expenses. The Group does not believe that any of its patents in isolation are material to the business. The aggregate original cost of intangible assets now fully depreciated but considered to be still in use is £471,000 (2017: £161,000).

During the year an extensive review was undertaken to identify which patents are of no further value to Nanoco and should be allowed to lapse. No such patents were identified. As a consequence, patents with a value of £nil (2017: £77,000) have been fully impaired in these financial statements. The impairment charge is recognised within administrative expenses.

13. Assets held for sale

	Plant and machinery £'000	Intellectual property £'000	Total £'000
At 1 August 2017	28	507	535
Reclassified during the period	(28)	(507)	(535)
At 31 July 2018	**–**	**–**	**–**

At 31 July 2017 these assets represented those held for sale following the Board's decision to dispose of the equipment and intellectual property arising from the Group's studies on solar power generation using CIGS (copper indium gallium selenide) materials. The Directors considered that these assets would be disposed of within twelve months through a sale transaction. Upon reclassification no re-measurement was necessary and therefore there have been no gains or losses recognised. All of the assets are held by the one operating segment. However, during the current year the Board decided that the assets were of continuing value to the Group's activities and therefore they have been reclassified back to tangible and intangible assets as disclosed above. Additional amortisation of £30,000 and depreciation of £16,000 was charged to administrative expenses in the current period to account for the fact that such charges were not made during the time when the assets were held for sale.

14. Investment in subsidiaries

Company	Shares £'000	Loans £'000	Loan impairment £'000	Total £'000
At 1 August 2016	63,235	23,373	(20,286)	66,322
Increase in respect of share-based payments	–	242	–	242
At 31 July 2017	63,235	23,615	(20,286)	66,564
Increase in respect of share-based payments	–	257	–	257
At 31 July 2018	**63,235**	**23,872**	**(20,286)**	**66,821**

By subsidiary				
Nanoco Tech Limited	63,235	–	–	63,235
Nanoco Life Sciences Limited	–	20,286	(20,286)	–
Nanoco Technologies Limited	–	3,586	–	3,586
At 31 July 2018	**63,235**	**23,872**	**(20,286)**	**66,821**

Loans to subsidiary undertakings carry no interest and are repayable on demand. Further information in relation to these loans is given in note 27.

Subsidiary undertakings	Country of incorporation	Principal activity	Share of issued ordinary share capital 31 July 2018	Share of issued ordinary share capital 31 July 2017
Nanoco Life Sciences Limited	England and Wales	Research and development	**100%**	100%
Nanoco Tech Limited	England and Wales	Holding company	**100%**	100%
Nanoco Technologies Limited*	England and Wales	Manufacture and development of nanoparticles	**100%**	100%
Nanoco 2D Materials Limited	England and Wales	Research and development	**100%**	100%
Nanoco US Inc.**	USA	Management services	**100%**	100%

All subsidiaries incorporated in England and Wales are registered at 46 Grafton Street, Manchester M13 9NT. Nanoco US Inc. is registered at 33 Bradford Street, Concord, MA 01742.

With the exception of the two companies footnoted below all other shareholdings are owned by Nanoco Group plc.

* Share capital is owned by Nanoco Tech Limited.

** Nanoco US Inc. is a wholly owned subsidiary of Nanoco Tech Limited. It was formed in July 2013, primarily in order to provide the services of US-located staff to the rest of the Group.

15. Inventories

	31 July 2018 Group £'000	**31 July 2018 Company £'000**	31 July 2017 Group £'000	31 July 2017 Company £'000
Raw materials, finished goods and consumables	**217**	**–**	188	–

A total of £144,000 (2017: £80,000) was included in cost of sales with respect to the cost of inventory expensed during the year.

16. Trade and other receivables

	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
Trade receivables	**290**	**–**	111	–
Prepayments and accrued income	**435**	**–**	329	–
Intercompany short-term loan to subsidiary	**–**	**60,508**	–	47,957
Less impairment provision	**–**	**(50,000)**	–	–
Other receivables	**690**	**–**	229	–
	1,415	**10,508**	669	47,957

Following the assessment of the carrying value of IP within the investment, and the likely repayment of the receivable by reference to discounted cash flow forecasts, management has concluded that the short-term loan of the Company to its primary trading subsidiary, Nanoco Technologies Limited, is now impaired with the carrying value impaired by £50 million (2017: £nil). The quantum of this provision will be reviewed at each reporting date.

Trade receivables are non-interest bearing and are generally due and paid within 30 to 60 days. The Directors consider that the carrying amount of trade and other receivables approximates to their fair value and that no impairment is required at the reporting date. Therefore there is no provision for impairment at the balance sheet date (2017: £nil).

Trade receivables are denominated in the following currency:

	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
US Dollars	**10**	**–**	15	–
Euros	**–**	**–**	53	–
Sterling	**280**	**–**	43	–
	290	**–**	111	–

At 31 July the analysis of trade receivables that were past due but not impaired was as follows:

	Not yet due £'000	Due but not impaired £'000	Past due but not impaired >90 days £'000	Past due but not impaired 120 to 150 days £'000	Total £'000
2018	**279**	**11**	**–**	**–**	**290**
2017	105	6	–	–	111

17. Cash and cash equivalents

	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
Cash and cash equivalents	**10,729**	**43**	5,706	4,670
	10,729	**43**	5,706	4,670

At 31 July 2017, cash and cash equivalents include an amount of £840,000 received from a customer for the purchase of capital equipment. The cash cannot be used for any other purpose.

Under IAS 7, cash held on long-term deposits (being deposits with original maturity of greater than three months and no more than twelve months) that cannot readily be converted into cash must be classified as a short-term investment. There were no such deposits at 31 July 2018 (2017: same).

An analysis of cash, cash equivalents and deposits by denominated currency is given in note 26.

18. Trade and other payables

	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
Current				
Trade payables	**2,016**	**–**	814	–
Other payables	**126**	**–**	136	–
Accruals	**878**	**–**	368	–
	3,020	**–**	1,318	–

The Directors consider that the carrying amount of trade and other payables approximates to their fair value. The average credit period taken is 41 days (2017: 37 days).

19. Financial liabilities

	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
Non-current				
Long-term loan from subsidiary	**–**	**450**	–	450
Convertible Series A loan note 2028	**400**	**–**	–	–
Accrued interest	**7**	**–**	–	–
	407	**450**	–	450

The loan note issued by Nanoco 2D Materials Limited is unsecured, bears a fixed interest at 6.5% pa and is fully repayable with accrued interest in 2028 unless options to convert into shares of that company have been exercised. The note holders have a right to convert the loan note into shares of the subsidiary in certain circumstances but these are within the control of the Company. Interest is not charged on intercompany loans (2017: no interest).

There have been no changes in liabilities arising from financing activities other than described in this note.

20. Deferred revenue

	31 July 2018 Group £'000	31 July 2018 Company £'000	31 July 2017 Group £'000	31 July 2017 Company £'000
Current				
Upfront licence fees	**102**	**–**	102	–
Milestone payments	**298**	**–**	–	–
	400	**–**	102	–
Non-current				
Upfront licence fees	**450**	**–**	552	–
Cash advanced from customers	**2,885**	**–**	–	–
	3,335	**–**	552	–
	3,735	**–**	654	–

Deferred revenue arises under IFRS where upfront licence fees are accounted for on a straight-line basis over the initial term of the contract or where performance criteria have not been satisfied in the accounting period. Additionally, cash received in advance from customers is accounted for in accordance with IFRIC 18, where the advance may be repaid as a proportion of future revenue under the contract.

21. Issued equity capital

Group	Number	Share capital £'000	Share premium £'000	Reverse acquisition reserve £'000	Total £'000
Allotted, called up and fully paid ordinary shares of 10p					
At 31 July 2016	237,077,578	23,708	112,217	(77,868)	58,057
Shares issued on exercise of options	1,213,750	121	431	–	552
At 31 July 2017	238,291,328	23,829	112,648	(77,868)	58,609
Shares issued on placing	47,655,821	4,766	3,812	–	8,578
Costs of placing	–	–	(629)	–	(629)
At 31 July 2018	**285,947,149**	**28,595**	**115,831**	**(77,868)**	**66,558**

The balances classified as share capital and share premium include the total net proceeds (nominal value and share premium respectively) on issue of the Company's equity share capital, comprising ordinary shares.

The retained loss and other equity balances recognised in the Group financial statements reflect the consolidated retained loss and other equity balances of Nanoco Tech Limited immediately before the business combination which was reported in the year ended 31 July 2009. The consolidated results for the period from 1 August 2008 to the date of the acquisition by the Company are those of Nanoco Tech Limited. However, the equity structure appearing in the Group financial statements reflects the equity structure of the legal parent, including the equity instruments issued under the share-for-share exchange to effect the transaction. The effect of using the equity structure of the legal parent gives rise to an adjustment to the Group's issued equity capital in the form of a reverse acquisition reserve.

Shares issued on placing

On 15 December 2017, 47,655,821 shares were issued at 18 pence each.

Company	Number	Share capital £'000	Share premium £'000	Total £'000
Allotted, called up and fully paid ordinary shares of 10p				
At 31 July 2016	237,077,578	23,708	112,217	135,925
Shares issued on exercise of options	1,213,750	121	431	552
At 31 July 2017	238,291,328	23,829	112,648	136,477
Shares issued on placing	47,655,821	4,766	3,812	8,578
Costs of placing	–	–	(629)	(629)
At 31 July 2018	**285,947,149**	**28,595**	**115,831**	**144,426**

22. Share-based payment reserve

Group and Company	£'000
At 31 July 2016	2,715
Share-based payments	242
At 31 July 2017	2,957
Share-based payments	257
At 31 July 2018	**3,214**

The share-based payment reserve accumulates the corresponding credit entry in respect of share-based payment charges. Movements in the reserve are disclosed in the consolidated statement of changes in equity.

A charge of £257,000 has been recognised in the statement of comprehensive income for the year (2017: charge of £242,000).

Share option schemes

The Group operates the following share option schemes, all of which are operated as Enterprise Management Incentive ("EMI") schemes insofar as the share options being issued meet the EMI criteria as defined by HM Revenue & Customs. Share options issued that do not meet EMI criteria are issued as unapproved share options, but are subject to the same exercise performance conditions.

22. Share-based payment reserve continued

Share option schemes continued

Nanoco Group plc Long-Term Incentive Plan ("LTIP")

Grant in November 2011

Share options were granted to staff and Executive Directors on 25 November 2011. The options granted to Executive Directors were subject to commercial targets being achieved. The exercise price was set at 50 pence, being the average closing share price on the day preceding the issue of the share options. The fair value benefit is measured using a binomial model, taking into account the terms and conditions upon which the share options were issued. Share options issued to staff vest over a three-year period from the date of grant and are exercisable until the tenth anniversary of the award, but are not subject to performance conditions.

Grant in October 2012

Share options were granted to staff and Executive Directors on 22 October 2012. The options granted to Executive Directors were subject to commercial targets being achieved. The exercise price was set at 57 pence, being the average closing share price on the day preceding the issue of the share options. The fair value benefit is measured using a binomial model, taking into account the terms and conditions upon which the share options were issued. Share options issued to staff vest over a three-year period from the date of grant and are exercisable until the tenth anniversary of the award, but are not subject to performance conditions.

Grant in May 2014

Share options were granted to certain staff on 23 May 2014. The exercise price was set at 89 pence, being the average closing share price on the day preceding the issue of the share options. The fair value benefit is measured using a binomial model, taking into account the terms and conditions upon which the share options were issued. The options vest at the end of three years from the date of grant and are exercisable until the tenth anniversary of the award. The awards are not subject to performance conditions. Vesting of the award is subject to the employee remaining a full-time member of staff at the point of vesting. No options were granted to Executive Directors.

Grant in October 2014

Share options were granted to an Executive Director on 14 October 2014. The exercise price was set at 10 pence, being the nominal value of the share. The fair value benefit is measured using a binomial model, taking into account the terms and conditions upon which the share options were issued. The options vest at the end of three years from the date of grant and are exercisable until the tenth anniversary of the award. The awards are subject to performance conditions which were amended during the year so as to be in line with the 2015 LTIP scheme. As a result of the modification, the fair value of the award was reduced. However, in accordance with IFRS 2 no change was made to the charge in the financial statements. Vesting of the award is subject to the employee remaining a full-time member of staff at the point of vesting.

Nanoco Group plc 2015 Long-Term Incentive Plan ("LTIP")

Grant in December 2015

Following approval of the new scheme at the 2015 AGM, share options were granted to four Executive Directors at nil cost. The fair value benefit is measured using a stochastic model, taking into account the terms and conditions upon which the share options were issued. The options vest at the end of the three-year performance period subject to meeting the performance criteria (as detailed in the Directors' remuneration report on page 61) and are exercisable after a two-year holding period until the tenth anniversary of the award.

Grant in April 2016

Share options were granted to an employee on 12 April 2016 at nil cost. The fair value benefit is measured using a stochastic model, taking into account the terms and conditions upon which the share options were issued. The options vest at the end of a three-year performance period subject to meeting performance criteria and are exercisable until the tenth anniversary of the award.

Grant in November 2016

Options were granted to the Executive Directors and all eligible staff on 22 November 2016 at nil cost. The fair value benefit is measured using a stochastic model, taking into account the terms and conditions upon which the share options were issued and are subject to a two-year holding period. The options vest at the end of a three-year performance period subject to meeting performance criteria and are exercisable until the tenth anniversary of the award.

Grant in December 2017

Options were granted to the Executive Directors and certain eligible staff on 6 December 2017 at nil cost. The fair value benefit is measured using a stochastic model, taking into account the terms and conditions upon which the share options were issued and are subject to a two-year holding period. The options vest at the end of a three-year performance period subject to meeting performance criteria and are exercisable until the tenth anniversary of the award.

Other awards

Share options are awarded to management and key staff as a mechanism for attracting and retaining key members of staff. The options are issued at either market price on the day preceding grant or, in the event of abnormal price movements, at an average market price for the week preceding grant date. On 14 October 2015, unapproved options were granted to a member of staff with an exercise price of 56.5 pence. These options vest over a three-year period from the date of grant with performance conditions and are exercisable until the tenth anniversary of the award. Vesting of the award is subject to the employee remaining a full-time member of staff at the point of vesting. The fair value benefit is measured using a binomial valuation model, taking into account the terms and conditions upon which the share options were issued.

22. Share-based payment reserve continued

Share option schemes continued

Shares held in the Employee Benefit Trust ("EBT")

The Group operates a jointly owned EBT share scheme but currently no shares or options are held within the Trust.

The following tables illustrate the number and weighted average exercise prices of, and movements in, share options during the year.

Group and Company	2018 total Number	2017 total Number
Outstanding at 1 August	**16,136,316**	14,008,022
Granted during the year	**3,787,608**	4,158,821
Exercised during the year	**–**	(1,743,839)
Forfeited/cancelled/lapsed	**(2,670,445)**	(286,688)
Outstanding at 31 July	**17,253,479**	16,136,316
Exercisable at 31 July	**10,076,620**	9,784,814

Weighted average exercise price of options

Group and Company	2018 Pence	2017 Pence
Outstanding at 1 August	**38.6**	48.9
Granted during the year	**–**	–
Exercised during the year	**–**	31.7
Forfeited/cancelled	**–**	22.6
Outstanding at 31 July	**35.9**	38.6

The weighted average exercise price of options granted during the year to 31 July 2018 was nil (2017: nil). The range of exercise prices for options outstanding at the end of the year was nil–110 pence (2017: nil–110 pence).

For the share options outstanding as at 31 July 2018, the weighted average remaining contractual life is 6.0 years (2017: 6.4 years).

The following table lists the inputs to the models used for the years ended 31 July 2018 and 31 July 2017.

	Market performance-linked grants		Non-market performance-linked grants	
Group and Company	2018	2017	2018	2017
Expected volatility	**62%**	59%	**62%**	N/A
Risk-free interest rate	**0.52%**	0.26%	**0.52%**	N/A
Expected life of options (years average)	**3**	3	**3**	3
Weighted average exercise price	**nil**	nil	**nil**	nil
Weighted average share price at date of grant	**26p**	49p	**26p**	49p
Model used	**Stochastic**	Stochastic	**Binomial**	Binomial

The expected life of the options is based on historical data and is not necessarily indicative of exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility is indicative of future trends, which may also not necessarily be the actual outcome.

Certain awards are subject to a holding period after vesting. A Finnerty model has been used to determine a discount for the lack of marketability of the shares.

23. Merger reserve and capital redemption reserve

Merger reserve

Group	£'000
At 31 July 2016, 31 July 2017 and 31 July 2018	**(1,242)**

The merger reserve arises under section 612 of the Companies Act 2006 on the shares issued by Nanoco Tech Limited to acquire Nanoco Technologies Limited as part of a simple Group reorganisation on 27 June 2007.

Capital redemption reserve

Company	£'000
At 31 July 2016, 31 July 2017 and 31 July 2018	**4,402**

The capital redemption reserve arises from the off-market purchase of deferred shares on 4 May 2005 and their subsequent cancellation.

24. Movement in retained earnings

Group	Profit and loss £'000	Foreign currency translation reserve £'000	Treasury shares £'000	Total retained earnings £'000
At 31 July 2016	(40,670)	–	(97)	(40,767)
Loss for the year	(9,110)	–	–	(9,110)
Exercise of options	(77)	–	77	–
At 31 July 2017	(49,857)	–	(20)	(49,877)
Loss for the year	(6,005)	–	–	(6,005)
Other comprehensive income	–	(13)	–	(13)
At 31 July 2018	**(55,862)**	**(13)**	**(20)**	**(55,895)**

Profit and loss represents the cumulative loss attributable to the equity holders of the Parent Company.

Historically, treasury shares included the value of Nanoco Group plc shares issued as jointly owned equity shares and held by the Nanoco Group-sponsored EBT jointly with a number of the Group's employees. At 31 July 2018 no shares in the Company were held by the EBT (2017: nil). In addition there are 12,222 (2017: 12,222) treasury shares not held by the EBT.

Company	Retained deficit £'000	Treasury shares £'000	Total revenue reserve £'000
At 31 July 2016	(25,028)	(97)	(25,125)
Profit for the year	30	–	30
Exercise of options	(77)	77	–
At 31 July 2017	(25,075)	(20)	(25,095)
Loss for the year	(50,025)	–	(50,025)
At 31 July 2018	**(75,100)**	**(20)**	**(75,120)**

25. Commitments

Operating lease commitments

The Group leases premises under non-cancellable operating lease agreements. The future aggregate minimum lease and service charge payments under non-cancellable operating leases are as follows:

	31 July 2018 Group £'000	31 July 2017 Group £'000
Land and buildings:		
Not later than one year	**988**	779
After one year but not more than five years	**2,027**	2,039
After five years	**–**	–
	3,015	2,818

Capital commitments

At 31 July 2018, the Group had capital commitments amounting to £1,940,000 in respect of orders placed for capital expenditure (2017: £nil).

26. Financial risk management

Overview

This note presents information about the Group's exposure to various kinds of financial risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital.

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The Executive Directors report regularly to the Board on Group risk management.

Capital risk management

The Company reviews its forecast capital requirements on a half-yearly basis to ensure that entities in the Group will be able to continue as a going concern while maximising the return to stakeholders.

The capital structure of the Group consists of equity attributable to equity holders of the Parent, comprising issued share capital, reserves and retained earnings as disclosed in notes 21 to 24 and in the Group statement of changes in equity. At 31 July 2018 total equity was £12,635,000 (2017: £10,447,000).

The Company is not subject to externally imposed capital requirements.

26. Financial risk management continued

Liquidity risk

The Group's approach to managing liquidity is to ensure that, as far as possible, it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group manages all of its external bank relationships centrally in accordance with defined treasury policies. The policies include the minimum acceptable credit rating of relationship banks and financial transaction authority limits. Any material change to the Group's principal banking facility requires Board approval. The Group seeks to mitigate the risk of bank failure by ensuring that it maintains relationships with a number of investment-grade banks.

At the reporting date the Group was cash positive with no outstanding borrowings.

Categorisation of financial instruments

Financial assets/(liabilities)	Loans and receivables £'000	Financial liabilities at amortised cost £'000	Group £'000	Loans and receivables Company £'000
31 July 2018				
Trade receivables	**290**	**–**	**290**	**–**
Other receivables	**75**	**–**	**75**	**–**
Intercompany short-term loan to subsidiary	**–**	**–**	**–**	**60,508**
Less impairment provision	**–**	**–**	**–**	**(50,000)**
Trade and other payables	**–**	**(2,894)**	**(2,894)**	**–**
Loan notes and accrued interest	**–**	**(407)**	**(407)**	**–**
Intercompany long-term loan from subsidiary	**–**	**–**	**–**	**(450)**
	365	**(3,301)**	**(2,936)**	**10,058**

Financial assets/(liabilities)	Loans and receivables £'000	Financial liabilities at amortised cost £'000	Group £'000	Loans and receivables Company £'000
31 July 2017				
Trade receivables	111	–	111	–
Intercompany short-term loan to subsidiary	–	–	–	47,957
Trade and other payables	–	(1,318)	(1,318)	–
Intercompany long-term loan from subsidiary	–	–	–	(450)
	111	(1,318)	(1,207)	47,507

The values disclosed in the above table are carrying values. The Board considers that the carrying amount of financial assets and liabilities approximates to their fair value.

The main risks arising from the Group's financial instruments are credit risk and foreign currency risk. The Board of Directors reviews and agrees policies for managing each of these risks which are summarised below.

Credit risk

The Group's principal financial assets are cash, cash equivalents and deposits. The Group seeks to limit the level of credit risk on the cash balances by only depositing surplus liquid funds with multiple counterparty banks that have investment-grade credit ratings.

The Group trades only with recognised, creditworthy third parties. Receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. The Group's maximum exposure is the carrying amount as disclosed in note 16, which was neither past due nor impaired. All trade receivables are ultimately overseen by the Chief Financial Officer and are managed on a day-to-day basis by the UK credit control team. Credit limits are set as deemed appropriate for the customer.

The maximum exposure to credit risk in relation to cash, cash equivalents and deposits is the carrying value at the balance sheet date.

Foreign currency risk

The Group is exposed to currency risk on sales and purchases that are denominated in a currency other than the respective functional currency of the Company. These are primarily US Dollars ("USD") and Euros. Transactions outside of these currencies are limited.

Almost all of the Company's revenue is denominated in USD. The Group purchases some raw materials, certain services and some assets in USD which partly offsets its USD revenue, thereby reducing net foreign exchange exposure.

The Group may use forward exchange contracts as an economic hedge against currency risk, where cash flow can be judged with reasonable certainty. Foreign exchange swaps and options may be used to hedge foreign currency receipts in the event that the timing of the receipt is less certain. There were no open forward contracts as at 31 July 2018 or at 31 July 2017.

26. Financial risk management continued

Foreign currency risk continued

The split of Group assets between Sterling and other currencies at the year end is analysed as follows (Company assets are all in Sterling):

	31 July 2018				31 July 2017			
Group	GBP £'000	EUR £'000	USD £'000	Total £'000	GBP £'000	EUR £'000	USD £'000	Total £'000
Cash and cash equivalents	**10,686**	**17**	**26**	**10,729**	5,659	7	40	5,706
Trade receivables	**280**	**–**	**10**	**290**	43	53	15	111
Trade payables	**(1,571)**	**(79)**	**(366)**	**(2,016)**	(503)	(5)	(306)	(814)
	9,395	**(62)**	**(330)**	**9,003**	5,199	55	(251)	5,003

All other categories of assets and liabilities in the statement of financial position are denominated in Sterling.

Sensitivity analysis to movement in exchange rates

The following table demonstrates the sensitivity to a reasonably possible change in the Sterling rate against other currencies used within the business, with all other variables held constant, of the Group's loss before tax (due to foreign exchange translation of monetary assets and liabilities) and the Group's equity.

Increase/(decrease)	Impact on loss before tax and Group equity 2018 £'000	Impact on loss before tax and Group equity 2017 £'000
10%	**(54)**	(32)
5%	**(28)**	(16)
(5)%	**31**	18
(10)%	**65**	39

Interest rate risk

As the Group has no significant borrowings the risk is limited to the reduction of interest received on cash surpluses held at bank which receive a floating rate of interest. The principal impact to the Group is to interest-bearing cash and cash equivalent balances held, which are as set out below:

	31 July 2018			31 July 2017		
Group	Fixed rate £'000	Floating rate £'000	Total £'000	Fixed rate £'000	Floating rate £'000	Total £'000
Cash and cash equivalents	**–**	**10,729**	**10,729**	–	5,706	5,706
Loan notes	**(400)**	**–**	**(400)**	–	–	–
Company						
Cash and cash equivalents	**–**	**43**	**43**	–	4,670	4,670

The exposure to interest rate movements is immaterial.

Maturity profile

Set out below is the maturity profile of the Group's financial liabilities at 31 July 2018 based on contractual undiscounted payments, including contractual interest.

2018	Less than one year £'000	One to five years £'000	Greater than five years £'000	Total £'000
Financial liabilities				
Trade and other payables	**2,894**	**–**	**–**	**2,894**
Convertible loan (including contractual interest)	**–**	**–**	**407**	**407**
	2,894	**–**	**407**	**3,301**

2017	Less than one year £'000	One to five years £'000	Greater than five years £'000	Total £'000
Financial liabilities				
Trade and other payables	1,318	–	–	1,318
	1,318	–	–	1,318

Trade and other payables are due within three months.

26. Financial risk management continued

Maturity profile continued

The Directors consider that the carrying amount of the financial liabilities approximates to their fair value.

As all financial assets are expected to mature within the next twelve months, an aged analysis of financial assets has not been presented.

The Company's financial liability, a long-term loan from a subsidiary undertaking, is due after more than five years.

27. Related party transactions

The Group

There were no sales to, purchases from or, at the year end, balances with any related party.

The Company

The following table summarises Intercompany balances at the year end between Nanoco Group plc and subsidiary entities:

	Notes	31 July 2018 £'000	31 July 2017 £'000
Long-term loans owed to Nanoco Group plc by			
Nanoco Life Sciences Limited		**20,286**	20,286
Nanoco Technologies Limited*		**3,586**	3,329
	14	**23,872**	23,615
Less provision against debt owed by Nanoco Life Sciences Limited	14	**(20,286)**	(20,286)
		3,586	3,329
Short-term loan owed to Nanoco Group plc by			
Nanoco Technologies Limited**	16	**60,508**	47,957
Less impairment provision	16	**(50,000)**	–
		10,508	47,957
Long-term loan owed by Nanoco Group plc to			
Nanoco Tech Limited	18	**(450)**	(450)

* The movement in the long-term loan due from Nanoco Technologies Limited relates to the recharge in respect of the expense for share-based payments for staff working for Nanoco Technologies Limited and is included in investments.

** The movement in the short-term loan due from Nanoco Technologies Limited relates to transfers of cash balances between the entities for the purposes of investing short-term funds and the funding of trading losses.

There are no formal terms of repayment in place for these loans and it has been confirmed by the Directors that the long-term loans will not be recalled within the next twelve months.

None of the loans are interest bearing.

28. Compensation of key management personnel (including Directors)

	2018 £'000	2017 £'000
Short-term employee benefits	**1,242**	1,218
Pension costs	**77**	73
Benefits in kind	**–**	32
Share-based payments	**243**	188
	1,562	1,511

The key management team comprises the Directors and three members of staff (2017: two) who are not Directors of the Company. The staff members of the team are the supply chain and compliance director, the applications development director and the head of investor relations.

INVESTOR INFORMATION

Directors

Dr Christopher Richards	Non-executive Chairman
Dr Michael Edelman	Chief Executive Officer
Dr Nigel Pickett	Chief Technology Officer
Brian Tenner	Chief Operating Officer and Chief Financial Officer
Dr Alison Fielding	Non-executive Director
Brendan Cummins	Senior Independent Non-executive Director

Secretary

Brian Tenner

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