Where innovation starts

IQE PLC
Annual Report and Financial Statements 2021

Company number 03745726

Where innovation starts

Page 8

What sets us apart
At the core of technology

Innovation starts at IQE. We create solutions that help our customers advance the world.

Highlights

£154m
Revenue

£13m
EBITDA

£19m
Adjusted EBITDA

£15m
Capital expenditure costs

£(20)m
Operating loss

£(6)m
Adjusted operating loss

£(6)m
Net debt

The nature and definitions of alternative performance measures are included in Note 5 on Page 111.

Page 4

Our value chain
Essential technology partner

Page 14

Americo Lemos
Meet IQE's new CEO

Contents

Strategic Report

Corporate Governance

Financial Statements

At a glance

Leading innovation from within

Who we are

IQE is the leading supplier of compound semiconductor wafer products and advanced material solutions to the global semiconductor industry. IQE is essential to technology growth markets, as the only compound semiconductor epitaxy foundry with a global footprint and proven ability to manufacture at scale.

Our strategy

To deliver the best advanced semiconductor materials solutions to our customers through technology leadership, value engineering and production excellence; to provide our employees with a safe, stimulating and rewarding work environment, to partner with our suppliers to form mutually beneficial relationships, and to provide all our stakeholders with a highly rewarding investment.

Read more on page
on page 18

Our delivery

In order to rise to the challenges demanded by our customers and markets, IQE has established a strong leadership position through the creation of the broadest portfolio of materials IP in the industry. We have developed a reputation for excellence and reliability through technology leadership and proven mass market delivery. Our close collaboration with our customers ensures that our processes are highly integrated and embedded within our supply chains.

***For a terminology guide please see* our glossary**
on page [illegible]

Our key products

Wireless

Our Wireless business offers the industry's broadest range of RF epitaxial wafer products that enable wireless connectivity, including in consumer mobile handsets, connected devices, 5G network infrastructure, Wi-Fi 6, Bluetooth and satellite communications. Our wireless products include GaAs, GaN, and InP based technologies, as well as Si and Ge based epitaxial wafer structures.

Read our Wireless review
on page [illegible]

Photonics

IQE's Photonics epitaxial wafer products can be found in consumer, commercial and industrial applications. Our key Photonics products include Vertical Cavity Surface Emitting Lasers (VCSELs) which are a key 3D sensing technology enabling facial recognition, gesture control, LiDAR and other advanced sensing applications, InP laser and detector wafers which power today's high speed 5G telecommunication and datacommunication fibre optic networks, GaN and GaAs for mini and micro LED displays, and an industry leading range of GaSb and InP materials which enable high definition infrared imaging and sensing in security, health monitoring and environmental applications.

Read our Photonics review
on page [illegible]

Substrates

Compound semiconductor substrates are the base material from which all Photonics and Wireless devices are fabricated through epitaxy processes. We are industry pioneers in substrate technology and offer an unrivalled range of materials and product forms. Our GaAs, InP, GaSb, InSb and InAs product range allows us to serve a broad and diverse range of device types and end markets, and positions IQE at the forefront of new product technologies which are made possible only by the substrate materials we provide.

Read IQE in the value chain
on page [illegible]

Our international reach

Europe

- Cardiff
- Newport
- Milton Keynes

North America

- Massachusetts
- North Carolina
- Pennsylvania
- Washington

Asia

- Taiwan
- Singapore

We are focused on consolidating our operations into strategic sites for business optimisation. Following the closure of our Singapore site in 2022, IQE will transfer the expertise, IP and assets from Singapore to our North Carolina and Taiwan sites. In 2021 we invested in eight new or refurbished tools in Taiwan to support future growth.

Our business

Revenue by segmentation

- Wireless [illegible]
- Photonics 44 [illegible]
- CMOS++ [illegible]

Read more [illegible]

Wireless segmentation

- Gallium Arsenide (GaAs) [illegible]
- Gallium Nitride (GaN) [illegible]

Read more [illegible]

Photonics segmentation

- VCSEL [illegible]
- Infrared [illegible]
- Other [illegible]

Read more [illegible]

Revenue by geography

- Europe [illegible]
- America [illegible]
- Asia 26 [illegible]

Read more [illegible]

Employees by location

- Europe 41 [illegible]
- America [illegible]
- Asia 24 [illegible]

Read more [illegible]

Number of employees

685

We have a highly skilled workforce across three continents.

Continents of operation

3

[illegible]

IQE is a critical supplier in the compound semiconductor supply chain

Where innovation starts

What is epitaxy

IQE manufactures compound semiconductor wafers or "epiwafers" using epitaxy. IQE designs its epitaxy processes to produce best-in-class materials that enable today's technology products.

Epitaxy is the technically challenging process of depositing high quality, crystalline layers on a substrate. By specifically choosing the composition and sequence of the layers in epitaxial growth, the optical and electrical properties of the epiwafer are able to be tuned. We grow our wafer layers in a specific atomic order depending on the desired performance qualities of the wafer, as requested by our customers. An epiwafer can include hundreds of individual layers, each of which may be as thin as two or three atoms.

Our epiwafers are then processed by our customers to produce the "chips" that are found in virtually all of today's technology devices.

Our manufacturing process

Substrate

1

Substrates are the base materials from which all Photonics and Wireless devices are fabricated. A substrate is used as the platform upon which we grow our epiwafers and is made out of *a variety of materials depending on its* intended use. We either manufacture or purchase a substrate, depending on customer requirements.

Epitaxy Process

2

To make our epiwafers we deposit up to 400 layers of compound semiconductor material onto a substrate using one of our highly specialised reactors. This *is an incredibly difficult process* and requires high specification cleanrooms, sophisticated production tools and high levels of intellectual property.

Our IP

IQE's intellectual property and know-how is rooted in over thirty years' experience in the design of advanced epitaxial processes for epiwafer manufacturing.

We have unparalleled knowledge of the materials and processes required to create atomic structures which deliver a wide range of electronic and optoelectronic properties. The quality and yields we achieve for our customers are unrivalled and it is our strong IP that truly sets us apart.

Read more about our IP portfolio
on page 37

Chip makers

3

We sell our epiwafers down the supply chain to chip makers, who process our wafers to fabricate devices that are subsequently diced into chips. One wafer can produce ten of thousands of chips, depending on the wafer size and application.

Device manufacturers

4

Chips are ultimately packaged into modules or devices that are integrated into end systems by device OEMs, who sell into various end markets.

Enabling technology

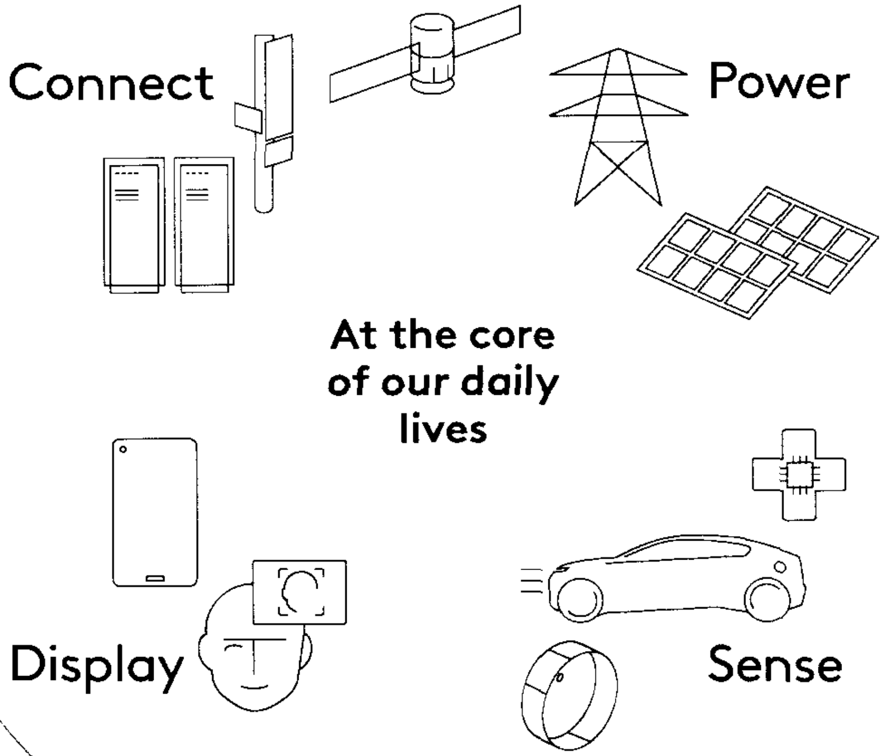
5

The end-market products we enable are at the forefront of technological advancement. IQE's epiwafers will be at the core of powering future mega trends.

- Smart mobile devices
- Communications infrastructure
- Automotive
- Aerospace & Security

Compound semiconductors are everywhere

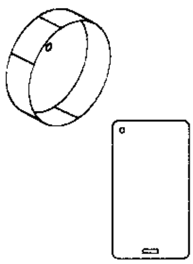
Compound semiconductors underpin a vast range of today's technology products. Their ability to operate at high frequencies, withstand high temperatures, and emit and detect light, make them an essential choice across key end markets.



IQE is a key strategic asset in the global technology supply chain

We are the world's only outsourced compound semiconductor epitaxy foundry with a global footprint and proven ability to manufacture at scale.

Consumer mobile



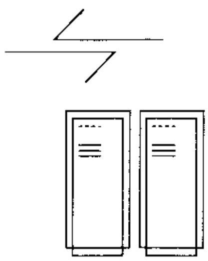
Mobile handsets

- Front end modules
- 3D Sensing
- Facial Recognition
- Time of Flight
- World facing applications
- High resolution displays

Wearables

- Heart rate monitors
- Augmented and virtual reality

Communications Infrastructure & Data Centre



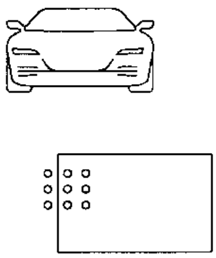
Wireless connectivity

- Base station infrastructure
- 4G, 5G, 6G
- mmWave mMIMO
- WiFi 6

High-speed, long-haul optical networks

Data centre optical links for cloud applications

Automotive



Drive train

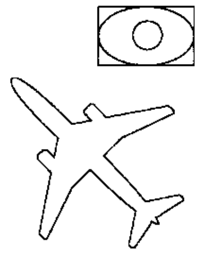
- Efficient power switching

LiDAR

- High power, long wavelength emitters
- High sensitive detectors

µLED displays

Aerospace & Security

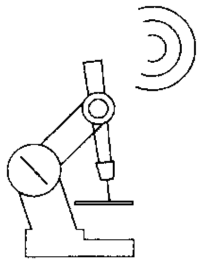


Radar & satellite communications systems

Thermal imaging

Defence systems

Energy, Industry & Environment



Lasers for cutting

Sensing for smart factories

HV switches for grid applications

UV sterilisation

Environmental sensing

For more information see iqep.com/products/

What sets us apart

We are the global epitaxy leader operating at the forefront of technology

IQE is the leading manufacturer of compound semiconductor wafers – a market set to expand due to large-scale technology trends.

We operate at the forefront of technology

Read our value chain

Macro trends will drive demand for IQE's advanced materials

Read our market overview

IQE's global manufacturing footprint is a strategic differentiator

Read about our international reach

5G and WiFi 6 are revolutionising connectivity. IoT and the Metaverse will leverage this connectivity to revolutionise the way we live and work. As these trends develop, demand for the unique performance characteristics of compound semiconductors will expand significantly."

Tim Pullen
Chief Financial Officer

We have an unrivalled IP product portfolio

Read about our Intellectual Property

Our people are experts

Read about Our People

IQE is uniquely placed in a growing market

Read our Business Model

Chairman's statement

Industry leaders positioned for the future

Dear shareholder,

It is a great privilege to be able to share my thoughts on 2021 with you, a year which was clearly challenging for many of us. For IQE, it was one in which we faced a number of headwinds but nonetheless made some significant progress.

Most notably, at the end of 2020 we announced we were looking to appoint a new CEO to take over from Dr Drew Nelson after his three decades with the business. Working with the Board, I oversaw a rigorous international search process to secure the ideal candidate to lead the business into its next stage. We were delighted with the volume and calibre of candidates and their enthusiasm to be a part of IQE.

Despite a number of hurdles, we were extremely pleased to announce Americo Lemos as the successful candidate in November, and, while the duration of the search was lengthened due to Covid travel restrictions and the senior level nature of the appointment, I am confident that we have found the right fit. Americo is a highly respected industry expert with significant knowledge and experience of the sector, from chip design to fabless to foundry and in many of the world's leading global technology companies. In addition to his industry expertise, he has cultivated powerful relationships and networks that will be pivotal in the evolution of IQE over the next few years and further cementing its position in the compound semiconductor ecosystem.

This year has been unlike any other for me, with me stepping in as Executive Chairman of IQE from September 2021 until January 2022, when Americo joined the business. This gave me a chance to engage more closely with the business and in particular, our people, and I continue to be impressed by their strength and resilience in what was a difficult year to

We believe that the future is built on compound semiconductors, and that new materials, such as those developed by IQE, are a necessity needed to solve the physical limitations of silicon semiconductors".

many coping with the ongoing global pandemic. IQE was fortunate not to have its operations significantly disrupted by Covid during the period, and this is in no small part due to the tireless efforts of our colleagues. I would like to take this opportunity to thank our Covid Committee, and all our colleagues, for helping us to navigate through these challenging times whilst keeping our sites safe.

Amidst this unprecedented and challenging macro environment, we saw supply constraints within the broader semiconductor industry and a softening of demand within smartphone supply chains. Additionally, 5G MIMO-based infrastructure deployments, most notably in China, were weak all year, resulting in reduced GaN sales for our Wireless business. There was, however, solid demand for our Wireless GaAs product throughout the year and this resulted in high use of our facilities in our Taiwan site. This demand will be supported by our investment in eight new and refurbished tools at the Taiwan site to support further growth in 2022.

Our Photonics business benefited from continued demand for VCSELs for 3D Sensing throughout 2021, however, we saw a 17% decline overall in revenues year on year. This occurred due to smaller chip sizes being required for facial recognition technology and the rephasing of some defence and security orders into 2022, resulting in a temporary decline in our Infrared business in 2021. This reduction was partially offset by additional customer qualifications and growth in the optical communications markets, as well as growing customer interest in our next generation long wavelength VCSEL technology.

These market conditions, coupled with a significant foreign exchange headwind, resulted in an 13% reduction in revenues year on year. Whilst extremely disappointing, we believe GaN remains an essential material for 5G infrastructure and demand is expected to recover over the multi-year deployment cycle. IQE remains essential to technology growth markets in many exciting end markets as we are the only compound semiconductor epitaxy foundry with a global footprint.

We achieved several key product milestones throughout the year, and we continued to make good operational progress during 2021. In September, we announced the closure of the Group's Singapore site as part of the Group's consolidation strategy. It follows our previous announcement regarding the closure of our Pennsylvania site and will enable us to consolidate our operations into strategic sites and transfer expertise, IP and assets to Taiwan and North Carolina, improving production efficiency and margins in the medium to long term. To further support efficiency improvements, we entered into a multi-year strategic IT transformation agreement with Critical Manufacturing to support the Company's future growth through a Manufacturing Execution System (MES).

We also entered into key strategic partnership agreements during 2021. In October, we announced a long-term strategic collaboration with GlobalFoundries to develop gallium nitride on silicon (GaN-on-Si) technology for mobile and wireless infrastructure applications. In addition, we also agreed a multi-year partnership agreement in Asia. Whilst we are contractually obliged to keep the details confidential, we are very excited about this partnership and we look forward to continuing to further our collaboration to evolve the industry with our customers.

Board matters

2021 has seen us make a number of changes to IQE's Board. We were pleased to welcome Victoria Hull, who was appointed as a Non-Executive Director and Remuneration Committee Chair, and an appointee to the Audit & Risk and Nominations Committee following Sir David Grant's retirement from the Board. I would also like to thank Sir David for his commitment to IQE and the Board during his tenure, particularly as Remuneration Committee Chair. Victoria is a great addition to the Board and possesses strong experience gained across a variety of sectors including technology as well as corporate finance, which is already proving invaluable.

During the year, Dr Drew Nelson transitioned from his previous role as CEO to a Non-Executive Director with the title of President. I would once again like to thank him for his dedication to the business. Through his vision and drive, IQE has established a solid platform with strong market positions and global leadership in compound semiconductors. We look forward to continuing to benefit from his industry expertise.

During the period, a Board-level Environmental, Social and Governance Committee was formed in order to develop and monitor the execution of IQE's ESG strategy, as well as to oversee the communication of the company's ESG activities with our stakeholders. This is a critical step in IQE's ESG journey, and reflects our commitment to continuous improvement and implementing best practice across the business.

Looking ahead

We believe that the future is built on compound semiconductors, and that new materials, such as those developed by IQE, are a necessity needed to solve the physical limitations of silicon semiconductors. Structural technology trends such as the Metaverse will drive IQE's future growth and the demand for sensing & display solutions. Additionally, many emerging technological trends such as AI, the convergence of information technology and biotechnology in applications such as wearables, along with the move to electric and autonomous vehicles, will rely on the capabilities of compound semiconductors. This is why we are so confident of the opportunities that lie ahead.

We will look to capitalise on our market-leading position under Americo's new leadership, with a renewed focus on close alignment with our customers, including through strategic partnerships. From these strong foundations, Americo will set out his strategy for the future direction of the business this year and I look forward to embarking on IQE's next phase of growth alongside him and our strengthened Board.

Phil Smith

Chairman

29 March 2022

Performance highlights

We recognise our success relies upon not only our financial performance, but achieving our operational and social goals.

Financial highlights

Revenue: £154m

Adjusted EBITDA*: £19m

Net debt: £(6)m

Capital expenditure cashflows: £15m

Adjusted operating profit/ (loss)*: £(6)m

Operating profit/ (loss): £(20)m

Adjusted diluted EPS (£p)*: (2.41p)

EPS (£p): (3.87p)

Non-financial highlights

Gender diversity (Group level)

Read more

Safety course completions

Total GHG emissions (tCO_2e)

Business review

Wireless

Dr Wayne Johnson
Executive Vice President
Sales & Business
Development

"The importance of compound semiconductor materials to key wireless applications has never been greater. Evolution of wireless standards, driven by the insatiable demand for increased bandwidth and low latency, has driven these applications even further toward the compelling value proposition of IQE's GaAs and GaN wafer products."

Photonics

Dr Mark Furlong
Executive Vice President
Product Management

"2021 saw our Photonics business capitalise on many new growth opportunities in megatrend markets, powered by IQE compound semiconductor technologies. Customer partnerships in aerospace and security as well as new opportunities in healthcare sensing and microLED displays will be transformative to our future Photonics revenue growth as market adoption accelerates."

CMOS++

Dr Rodney Pelzel
Chief Technology Officer

"IQE continues to be the technology leader for the integration of compound semiconductors on Silicon and Germanium. This leadership makes IQE the partner of choice for new market entrants, being Silicon foundries."

CEO's statement

IQE welcomes Americo Lemos as CEO

Americo joined IQE in January 2022 as Chief Executive Officer, bringing with him a wealth of experience from across a broad spectrum of global technology companies.

He is a highly respected industry expert with significant knowledge gained in various executive positions throughout the semiconductor value chain. Most recently he was at GlobalFoundries as Senior Vice President of Business Development for Asia Pacific and China Country President. Prior to this, he was Senior Vice President at Qualcomm, responsible for its data centre business. Before joining Qualcomm, Americo was Vice President of Platform Engineering at Intel, responsible for strategic ventures with Chinese semiconductor companies. With over 25 years of experience, he possesses a strong mix of commercial expertise, longstanding customer relationships and specific market knowledge. As a proven leader, Americo understands the importance of building connections with both customers and team.

Americo's appointment is an exciting new phase for IQE in its journey of compound semiconductor market leadership. We warmly welcome Americo and we look forward to sharing his journey over the years to come as we work to provide advanced technology solutions to shape the future and enable a new digital age.

"

I am extremely excited by the opportunities that lie ahead for IQE, and the critical role we play in the semiconductor ecosystem. Recent events such as the global pandemic have demonstrated the criticality of electronics and semiconductors in our everyday lives, and with its global footprint IQE is strategically positioned in the compound semiconductor value chain to fuel the next wave of innovation."

Executive Leadership team

Q: What attracted you to IQE?

A: I am extremely excited by the opportunities that lie ahead for IQE and the critical role we play in the semiconductor ecosystem. Recent events such as the global pandemic have demonstrated the centrality of electronics and semiconductors to our everyday lives, and with its global footprint IQE is uniquely positioned in the compound semiconductor value chain to fuel the next wave of innovation. I am honoured to be taking the helm of this esteemed global business at such an exciting time for our industry.

Q: How do you plan on using your significant international industry experience?

A: I have over 25 years' experience in the industry and have had the chance to work for some of the greatest technology companies in the world. I joined IQE having spent a number of years working across the semiconductor space, with experience ranging from systems to chip design and involvement in semiconductor foundries, most recently as GlobalFoundries' Senior Vice President of Business Development for Asia Pacific and China Country President. This international outlook, experience in delivering growth in Asian markets and knowledge of our customer base will be an essential tool as we shape the strategy and vision for the business.

Q: How have you found relocating to the UK?

A: I am married with two grown up sons and we have recently been living in California, so this is a big change. Our family has been lucky enough to have had the opportunity to travel significantly and live in different places around the world, and we always relish the opportunity to experience different cultures. My wife and I are very excited and looking forward to discovering all the wonderful things the UK has to offer.

Q: What have you learnt in your early conversations with colleagues and customers?

A: I am thoroughly impressed with the dedication and knowledge of my new colleagues at all levels of IQE. They are world class and have given me a very warm welcome. In particular, I must recognise our interim Executive Leadership Team who, alongside new hires, will provide strategic and operational leadership to the business. It is important that we have a strong team with the right breadth and depth of skills with a laser focus on our people, culture, processes, and strategies. The ELT is empowered to make efficient and effective decisions to drive business and operational performance.

Q: What are your plans for the business?

A: My core objectives are to restore growth at IQE and to build a strong technology roadmap as well as a diversified customer base to capture the opportunities presented by upcoming megatrends in the industry. I have been encouraged by conversations with our valued customers who are keen to be in the centre of the commercial relationships with IQE. This will be a focus for me in the coming months. My immediate priority will be about putting in place a structure to enable us to scale the business and set us up for success. I look forward to updating the market on my vision for the strategic direction of the business in due course.

Q: What difference will shareholders and other stakeholders see?

A: I recognise that the business has faced challenges, but I am confident that with a clear strategic direction and focus on executing our business plan we can deliver a strong platform for growth and long term sustainable returns for our shareholders into the future. From a customer perspective we must shift to becoming a global customer centric organisation underpinned by strong commercial and strategic partnerships with a deep understanding of their needs. I believe IQE has a bright future – we are uniquely placed in a growing global market and I look forward to realising all of the opportunities that lie ahead.

Americo Lemos
Chief Executive Officer

29 March 2022

Our business model

What makes our model work

Long-standing partnerships with customers

IQE is a materials solutions provider, enabling advanced technologies throughout major global supply chains. We work with customers across the value chain.

Highly skilled and experienced people

IQE attracts and develops the top talent in the compound semiconductor industry, and is therefore able to offer a wealth of technical expertise across our product portfolio.

Breadth of intellectual property portfolio

With an extensive patent portfolio and significant process IP utilising MOCVD, MBE and CVD platforms, IQE has an enviable and protected position within diverse technology markets.

Widely recognised technology leadership

As a materials specialist with a commitment to innovation, IQE is at the forefront of new technology and has a track record of enabling major technological product trends, from R&D to mass production.

Global manufacturing footprint

Headquartered in the UK and with manufacturing operations in three major continents, IQE has broad market access, close customer proximity and global manufacturing flexibility and resilience.

Superior quality is a core competence

With a reputation for manufacturing products of the highest quality, IQE's wafers deliver superior yields and are recommended to our end customers.

How we create value

Research & development

A programme of innovation that drives leading edge technologies, working in partnership with the world's major technological supply chains.

New products

Developing leading edge products with superior performance and quality characteristics, enabling the technologies of today and tomorrow.

Underpinned by:

Our culture & values

IQE's strength lies in the expertise and diversity of our workforce and we recognise that teamwork and collaboration are at the heart of the Company. We strive for a culture of integrity, accountability, excellence, valuing openness and teamwork.

Our strategic goals

By investing in the future of compound semiconductors and scaling up the business for growth, IQE is targeting expanding margins and cashflows. Integral to this is the development and mass production of advanced materials that are key to the macro trends such as the proliferation of 5G communications, Wi-Fi 6 connectivity, the Internet of Things, Augmented Reality and the Metaverse.

Expanding margins and cash generation

Manufacturing capacity

Investment in our large scale mass production foundries has created the scale for us to capitalise on the expanding compound semiconductor market.

Customer qualification

Exacting quality standards, world-leading IP and process know-how enables broad product qualification with major international customers.

Mass production

As volumes increase within an expanding industry, superior economies of scale and operating leverage can be achieved.

Sound governance & risk management

As a global operator with a 30 year heritage, IQE has an enviable record of operating safety, compliance and continuity of operations. The semiconductor industry is dynamic and fast paced; however oversight from our Board ensures the strategy and execution of our business incorporates best practice and proactive risk management.

Responsible business operations

The health and safety of our people, the environment and the communities in which we operate are of paramount importance. We view our global supply chain as an extension of our business and for this reason we are committed to operating responsibly.

Expanding margins and cash generation

The values we share

Customers

Innovative new product offerings to enhance the competitive advantages of our customers

£3m

Technology related development expenditure

Employees

We are committed to promoting an environment and culture that provides agile and lifelong learning

2,719

Hours of training completed 2021

Investors

We continue to re-invest in growth and innovation positioning the Group for a multi-year growth cycle

£15m

Capital expenditure investment in 2021

Communities

We seek to contribute to the economic, social and environmental sustainability of our local communities through a range of initiatives

1 day

Annual paid employee volunteering leave entitlement

Environment

We ensure that our activities and manufacturing operations are conducted in a way that minimises our impact on the environment

23,772 tCO_2e

Total GHG emissions

Our strategy

Our strategic progress

IQE operates in a market with high barriers to entry, where our deep expertise, process know-how and intellectual property portfolio provide a significant competitive advantage.

Our Wireless strategy

IQE is the number one manufacturer of GaAs wafers for handset power amplifiers, having grown through organic and inorganic strategies. As the front end module of mobile handsets incorporates greater integration over time, and as 5G technologies proliferate, compound semiconductor content is increasing in these devices. IQE's GaAs wafers are integral to both 5G handsets and WiFi 6 routers, both of which experienced significant sales growth in 2021. IQE's GaN wafers are found in 5G base stations, in particular Massive MIMO. Whilst deployments of these slowed in 2021, a significant future infrastructure build is anticipated.

Our Photonics strategy

IQE is the market leader in VCSEL wafers used for 3D sensing, being the only outsourced epi wafer manufacturer globally to have scaled and sustained mass production of this product. IQE's heritage in laser technologies and past investments in R&D have generated this position, with a broad portfolio which includes InP lasers for datacoms and SWIR lasers for [illegible] face and security applications. Sensing technologies are set to proliferate in many future devices and use cases, with anticipated growth in the Internet of Things, augmented reality and the Metaverse.

Investing in the future of compound semis

Strategic goal

Leveraging and expanding our IP portfolio

Developing new products

Targeting new market entry

Innovation in integration and miniaturisation

Scaling up the business for growth

Strategic goal

Expand Group capacity

Qualify customers in strategic markets

Enhance management controls, systems and processes to enable mass production

Expanding margins and cashflows

Strategic goal

Superior unit economics from improved yields and economies of scale

Customer and market diversification

Developing relationships as a materials solutions provider

Progress in 2021

- Expansion of VCSEL portfolio with turnkey IQVCSEL™ product line
- Achievement of key power and reliability milestones for its IQDN-VCSEL™ technology for advanced sensing applications at longer wavelengths on 150 mm GaAs substrates
- Scaling of IQE's VCSEL on Ge technology (IQGeVCSEL) to 200 mm
- Focussing our development programmes on market driven solutions. Longer term developments such as cREO™ and PQC are being deprioritised in the short term
- Expanding IP Portfolio – eight new grants and five patents registered in 2021

Future objectives

- Building our universal roadmap for compound semiconductors at scale. IQE's materials underpin connectivity, advanced sensing and power applications, enabling the key macro trends of 5G, Big Data and IoT, advanced healthcare, the Metaverse and autonomous driven vehicles
- Developing next generation Wireless products for 5G communications (including mmWave) and 5G handsets (including front end module integration)

Page 32

Intellectual Property
Read our IP update

Progress in 2021

- Capital expenditure of £15.1m focused on deployment of additional tools to meet demand for IQE's Wireless products in Asia
- The project to close IQE's Pennsylvania US site by 2024 and consolidate the Group's US MBE development and production at the North Carolina US site is on track
- Business systems and process transformation programme on track to provide a consistent, global and scalable platform for business growth
- Several key appointments made to strengthen the management team

Future objectives

- Ongoing global footprint optimisation to maximise participation in global markets, deliver structural economies of scale and maximise production scalability
- Completion and benefits realisation from the business systems and process transformation programme

Page 28

Key appointments
Read about our key talent acquisition

Progress in 2021

- Closure of IQE's Singapore site by mid 2022, delivering c.£[illegible]m per annum of cash savings
- Long term strategic collaboration agreements signed with GlobalFoundries to develop new GaN on Si technologies for mobile and wireless infrastructure applications
- Multi year strategic partnership signed with a major semiconductor foundry to develop devices for 5G applications

Future objectives

- Continuous improvement in yield management, operational optimisation and customer responsiveness to ensure IQE is best placed to target profitable growth
- Drive to higher operational gearing, margin and cash flows in line with higher volumes

Page 22

Technology Roadmap
See our development pathways

Market overview

Compound semiconductors: Essential for innovation

The marketplace

The compound semiconductor marketplace is set to expand with the proliferation of 5G and a new age of connectivity. The advanced properties of compound semiconductors are increasingly used to enable devices to operate at high power, high frequency or to emit and detect light, overcoming the limitations of silicon semiconductors. IQE is at the forefront of enabling new technology trends which will shape the way we live over the coming years.

What we're focused on

While IQE's products have many end-market applications and increasing future use cases, in 2021 we were primarily focussed on enabling these key technologies:

3D and Advanced Sensing Applications

Facial recognition
'World facing' cameras enabling
Augmented and virtual reality
Structured light and Time of Flight (ToF) solutions
Long-wavelength VCSELs
In-cabin automotive and LiDAR
Environmental and healthcare monitoring
Proximity sensing

5G Network Infrastructure and Data Connectivity

5G Handsets

Front end module integration
5G switches and filters
Displays

Future trends

The future will be enabled by compound semiconductors. Their unique properties are required in order to overcome the fundamental limitations of silicon, the mainstay semiconductor material. The integration of compound semiconductors with leading edge CMOS technology enables a multitude of advanced applications. Key future technology trends will shape our markets and revolutionise the world as we know it and drive end demand for our products.

Data centres and The Edge

Technology applications across all markets require huge amounts of data to be transmitted quickly and accurately. The data 'super highway' is reliant on both high data rate wireless and wired technology, both of which are dependent on IQE's materials. On the wireless side, IQE's GaN solutions are a key enabler. For optical networks and data centres, IQE's DFB and APD solutions are necessary for high speed interconnects and transceivers.

Healthcare wearables

Advanced healthcare is an emerging market that will drive significant demand for compound semiconductors. A key trend is the adoption of wearable health care monitors that are being deployed in devices such as smart watches. In their current form, wearables allow users to monitor personal health and exercise data such as blood pressure, oxygen saturation and Electrocardiogram readings.

Future applications will provide non-invasive monitoring of blood biomarkers using lasers and photodetectors in the form of miniaturised, wearable spectrometers. Possible applications include the measurement of key blood constituent concentrations for markers such as glucose, lactose and alcohol. In addition, this technology offers unique possibilities for virus and disease detection.

Ultimately, the entire family of compound semiconductor materials will be required to enable comprehensive wearable technology. IQE is the only compound semiconductor materials company that is able to manufacture the full product suite at scale. As such, we anticipate the increased functionality required by advanced wearable devices will drive the demand for IQE's products, and we are excited to be a key enabler for next generation healthcare.

Next Generation Automotive

Autonomous electric vehicles are the future of the automotive industry. The realisation of self driving vehicles relies on IQE's products. Advanced driver assistance systems (ADAS) use LiDAR (Light Detection & Ranging) that will be enabled by IQE's VCSEL and APD technology. Ultimately, it is desirable to use longer wavelength VCSELs for eye safety at street level. IQE is the leader in developing this next generation LiDAR enabler. Vehicle electrification also requires highly efficient power electronics that are underpinned by IQE's GaN technology. Finally, autonomous vehicles will require ultra-reliable high speed data connections. Again, IQE's materials are the foundation that make this possible.

Metaverse

The Metaverse is a 3D immersive experience that allows an individual to interact with a virtual environment, relying on advanced sensing and display technology that are dependent on compound semiconductors. IQE has a well established pedigree for developing, scaling and manufacturing complex materials solutions that it will leverage to provide the materials that underpin the metaverse. IQE's advanced VCSEL and InP technology will be front and centre as this market develops, and IQE is developing μLED materials that will be critical to high resolution displays needed to make the Metaverse a reality.

Integration with CMOS++

As noted, the future depends on the integration of compound semiconductors with silicon in order to combine the performance advantages of both. Effective integration will see compound semiconductors move to larger wafer diameters (8 inch and 12 inch) in order to match the wafer sizes used by today's silicon industry and to leverage the maturity of automation that exists for 8 inch and 12 inch toolsets. Moving to larger wafer diameters will unlock new relationships with new partners that will ultimately result in business growth for IQE.

Proliferation of 5G

5G and connected devices are self reinforcing macro trends that will transform the way we live over the coming years, and IQE's technologies are critical for 5G handsets and infrastructure. In addition to higher speeds, 5G ensures low latency, massively improving the time to match the connections and network scaling.

The rollout of 5G has arguably stalled slightly, however the world continues to embrace and deploy 5G technologies, and we anticipate this being a multi-year, mega replacement cycle. Over time, the improved connectivity associated with 5G will allow the full potential of the Internet of Things to be realised.

Read our Technology Roadmap
on page ??

Technology roadmap

IQE has a focused roadmap which lays out our future technology development goals. Through the combination of cutting edge innovation and the widest product portfolio in the industry, IQE is where innovation starts.

Wireless

Short Term

5G Handsets
- High efficiency power amplifiers
- Integrated PA & switch

5G Infrastructure
- mMIMO
- Macro cells
- Power and low-noise amplifiers

WiFi 6/6E
- Power Amplifiers for routers

Medium Term

5G Handsets
- Continued 5G handset penetration

200mm Transition
- IoT
- mMIMO
- RF energy

Long Term

5G Handsets
- Pathway to integration of CS on Silicon
- Front end module integration

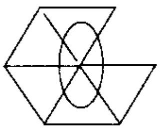
5G NR mmWave
- Densification of networks with small cells

Power Electronics
- High efficiency power switching
- Smart grids

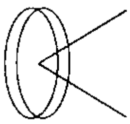
Photonics

Short Term

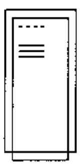
3D Sensing Content Gain
- World-facing camera (ToF – Lidar)
- DToF (WFC) for Android market



Advanced Sensing
- Sb & P based detectors and emitters for advanced infrared sensing applications
- Aerospace and security applications

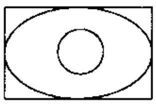


Connectivity
- InP for high speed datacom and telecom networks
- VCSELs for short length datacoms
- Critical enabler for 5G applications

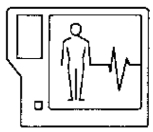


Medium Term

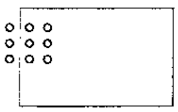
3D BOLED Sensing
- Beneath Screen (Below OLED) 3D Sensing



Advance sensing for healthcare
- Non-invasive clinical-grade measurement of health bio-markers



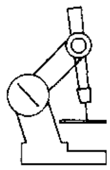
Displays
- Emissive displays: Micro & Mini LED – power efficiency, contrast and resolution



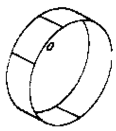
Long Term

Automotive Sensing/LiDAR
- Development of long-wavelength laser technology for autonomous vehicles

8-inch VCSEL
- Patented material system
- High volume manufacturing platform



Display for wearables
- GaAs, GaN based Micro LED display technologies for augmented reality applications



Our People

IQE's strength lies in the expertise and diversity of our workforce.

> **"IQE understands that its continued growth and success will be built not only on operational results, but also *from ensuring we have strength from* diversity and clarity of purpose, strong leadership, teamwork and alignment to our vision."**
>
> **Clare Farmer**
> Chief People Officer

Diversity, Equity and Inclusion (DEI)
IQE is made up of different races, genders, ethnicities, backgrounds, religions and beliefs across the globe. IQE is committed to providing equal opportunity, fair treatment and inclusion to all, *without regard to race, gender, age,* religion, ethnicity, identity, sexuality, disability, genetic disposition, neurodiversity, veteran status, perspective, experience or any other aspect which *makes an individual unique.* Following [illegible] we are revisiting our company values to make sure we are cultivating a work environment where different perspectives, inclusive relationships and diverse networks can [illegible] [illegible] potential to [illegible]

● Female 29

Male 71

Gender Diversity -
Board level

● Female 16

Male 84

Gender Diversity -
Group level

● [illegible] female hires

[illegible] male hires

Gender diversity -
Group level recruitment

A central part of our DEI commitment is our desire to demonstrate inclusive leadership and represent the diversity of our organisation and the communities where we live and work. Heading into 2022, we continue to invest in developing our company culture with our *Executive and Senior* Leadership Teams beginning their own learning and cultural awareness programmes so they can inspire a culture of belonging from within IQE and ultimately drive greater representation at the highest levels. We are sourcing Diversity Partners across the Group who have a shared interest in DEI education and advocacy.

We recognise that gender diversity remains an ongoing issue within our industry, however we are committed to improving our gender balance. Our percentage of female employees remained at 16% in 2021 and 2020, reaffirming our need to redress this balance. Due to a reporting error our 2020 Annual Report incorrectly reported the gender diversity split at Group level of 74% male and 26% female.

In 2021 33% of senior leadership vacancies were filled by women, which was unchanged from the previous year. Our female representation on the Board increased to 29% with the appointment of Non Executive Director Victoria Hull in [illegible].

We support our Talent Acquisition Team to increase inclusion during the hiring process and have aimed to attract, develop and retain STEM talent and recruit more BAME talent. We aim to achieve this through our Employee Value Proposition (EVP), using our [illegible] and [illegible] engagement with [illegible] [illegible] [illegible] [illegible] [illegible]

Diversity, Equity and Inclusion –
Attraction & Selection

In 2021 our Talent acquisition team attended DEI workshops to raise awareness of unconscious bias during the selection process. Practical steps taken to improve hiring practices include job advertisements being adapted to highlight flexible working arrangements and the removal of biased language to encourage a wider candidate pool, as well as interview panel formations being reviewed to further encourage inclusion. We have also sought new networks with diverse advertising job boards to appeal to and encourage sought after candidates. An example of this is our partnership with 'Women Rock', a recruitment network celebrating women in technology.

In 2021

33%

of senior leadership vacancies were filled by women.

IQE understands that when everyone feels valued, appreciated and free to bring their full, authentic selves to work, they can then be more creative, innovative and successful. Through our culture transformation, IQE continues to invest in its evolving journey of effective and sustainable DEI transformation.

Employee wellbeing

IQE is focusing on the physical and mental health of our employees, particularly after the pressure brought about over the last two years by the global pandemic. We routinely promote wellbeing support available through our employee benefits platforms and undertake benefits sessions with our providers to ensure our leaders, line managers and employees are connected.

January is Benefits Month and in 2021 we focussed on communicating our employee benefits across the Group, with an emphasis on what we offer and how to access and effectively utilise personal benefits. IQE continuously reviews the make up to ensure our plans are attractive and market competitive to our employees and, where possible, their families. We were pleased to see an increase in benefit participation in 2021.

We have ten qualified Mental Health First Aiders at IQE with other employees awaiting requested training to increase support across the Group. We have a forum which holds planning for international and national events to proactively work towards breaking down the stigma of seeking mental health assistance. We recognise Mental Health Awareness Week with a range of communications and support, including an engaging series of videos across our global organisation showing how each of us were coping during lockdowns.

Our Employee Assistance Programme (EAP) offers 24/7 support that includes bereavement assistance, counselling, legal and financial support. Early intervention assistance is provided through external specialists and employee wellness plans, mitigating absences and aiding returns to work.

[illegible]

Our People
continued

Communication and engagement

In 2021 we engaged with Best Companies, a leading employee engagement specialist who deliver powerful data and insights to help positive change within the workplace. We undertook our first formal employee engagement survey titled 'b-Heard' and were delighted to receive an 86% respondent rate. We achieved 'One to Watch' status which represents 'Good' levels of workplace engagement as well as uncovering 3, 2 and 1 Star businesses amongst our Group. This was a fantastic result for our first year.

The b-Heard feedback encouraged us to create action plans to improve. These were driven bottom up, reflecting what our employees believe we do well, where they believe we could close engagement gaps, whilst also sharing pockets of great practice. We are very proud of our 'One to Watch' status which we will seek to retain and improve upon. We have a strong desire to achieve a star for the Group overall.

Procurement of Workplace in 2020, an internally focused connectivity platform developed by Facebook, Inc. has enabled the continued use of groups, instant messaging and a news feed to encourage employee communication. At the time of writing, we have 394 users and 33 dedicated groups, a 20% increase in users since 2020. Our leaders and employees have utilised the functionality to its fullest and genuinely engage with each other virtually. This has been a resounding success for our business and allowed us to maintain vital and important social connection whilst working remotely. Since its launch in August 2020, we have seen over 1,710 posts created generating 1,699 comments and 22,975 reactions. Workplace also [illegible] health and wellbeing.

Across the Group, leaders continue to engage with employees through monthly communication [illegible] sessions and breakfast meetings which enable employees and leaders to meet, [illegible] ideas and forge strong relationships.

Diversity, Equity and Inclusion –
Attraction & Selection

We are committed to promoting an environment and culture that provides for agile and life-long learning with the following aims:

2,719

hours of learning completed in 2021
(2020: 2,492 hours)

- **Transform how we train our people, embracing digital training methods and agile learning**
- **Ensure our engineering and technical employees have defined training pathways and we can demonstrate visibility around training execution and evaluation**
- **Shape the culture whilst embracing technology to simplify and create access for all to learn in an agile work environment**
- **Align our Learning Management System with our Quality Management System to ensure the effective management of competence.**

Performance Management

"Performance Hub" was implemented in early 2020 to simplify and standardise the performance cycle within IQE. Performance Hub provides employees and managers a platform to record one-to-ones, share transparent and honest feedback, performance reviews and utilise the Personal Development Plan functionality to further support personal and career development. This has been supported by user friendly guidance notes and videos crafted with inexperienced people managers and new joiners in mind.

In 2021 we introduced a calibration stage to our Performance Management cycle, promoting fairness and parity of performance and behavioural ratings whilst identifying emerging and high performing talent essential for effective succession planning and organisational bench strength. This also mitigates single points of failure and retention risks through proactively tracking the others and defining individual career pathways through "Career on a Page".

Empowering and supporting our talent

IQE attracts the best and brightest global talent and we work hard to offer an unparalleled experience recruiting, retaining and developing the best talent in our sector.

We are continuing to use our Competence Management System which incorporates a formal Learning and Assessment Process and various training and development forms and logs. Training processes are now communicated with department and formalised via our document control systems.

Through the use of Personal Development Plans we have effectively identified, conducted and facilitated training and development activities [illegible] which [illegible] government funding.

This includes supporting professional development through formal qualifications, as well as enhancing on the job knowledge and skills. In 2021 314 of our employees participated in Personal Development Plans.

The [illegible] Head survey indicated a need to support the development of the leadership teams. In partnership with Results Exploration Group and The Engagement Coach, IQE started management with a focus on engagement, emotional intelligence and teamwork. The survey supported our focus to develop our people and we continue to do so as we strive to create engagement opportunities.

The Vault

Whilst the global pandemic continued to impact our ability to offer face to face learning, we continued to improve our online course offerings through our Learning Management System "The Vault". We have been working with our global teams to create bespoke content tailored to our colleagues. Recently this has included a series of Risk and Governance courses, and Quality, Health and Safety Modules are being reworked to raise awareness and mitigate risk.

Early Careers

IQE is directly invested in supporting apprenticeships and fostering early careers. In 2021 we reviewed the current early career programme and reaffirmed its value to the business, with a focus on supporting apprenticeships, graduates and PhD sponsorships.

We have established relationships with several colleges and universities to attract, develop and retain the next generation of IQE. 2021 saw us attend our first virtual careers fair, which was a resounding success, securing hires and candidates excited about the possibilities working with IQE.

Talent Acquisition

Steven Curwood
Group Head of Marketing

"I joined IQE as Group Head of Marketing in September based in the UK. I'm excited and proud to have joined the IQE family to lead our marketing efforts. I was inspired to join IQE because of its heritage, ambitions and the opportunity that lies ahead for the business. It is an exciting time to be a part of IQE as we are uniquely positioned to capitalise on the opportunities within the industry and support the development of technologies such as 5G. I am beyond excited to be working in an industry that is at the centre of everyone's daily lives. We have a great story to tell and I cannot wait to communicate what we do."

Elena Carabeau
Quality Intern

"When I first started my internship at IQE North Carolina in the summer of 2021, I wasn't sure what to expect. I'm an English major and a lifelong humanities student, and I didn't know if I could really help that much at a technology company - especially one that produced a product I'd never heard of in a way I didn't quite understand. But I've been blown away by all I know now. I've learned an incredible amount, whether by touring the cleanrooms and facilities, getting briefed on projects and IQE's environmental health and safety protocols, getting to help operate the emergency generators, or just by reading through documents. I'm able to reflect on how grateful I am for this opportunity and what a wonderful experience it was working in the Quality department at IQE."

Shariq Enver
Technical Sales Manager

"I was delighted to join IQE as a Technical Sales Manager, working out of the Wafer Technology site in Milton Keynes. Sales is my passion and it is exciting to be working for a company that operates right at the cutting edge of science and technology. Having graduated with a degree in Materials Science, I decided to make the move from a commercial role where I thoroughly enjoyed negotiating and closing contracts, whilst expanding our customer base and developing new business. I look forward to doing the same here at IQE with our exceptional range of products."

Debra Bailey
Shift Manufacturing Manager

"When I first started my role with IQE I was quite apprehensive. Although I have a background in engineering, and several years' experience within manufacturing, I mainly worked in the automotive sector and I did not know what to expect working for a technology company. I am really pleased I took the opportunity to join IQE, and am really enjoying learning about the processes and the equipment. I also find growing wafers fascinating, and something which I knew nothing about before starting my role here. Although it has been challenging at times, and a lot of information to take in, everyone has been really supportive and patient, and I am starting to understand what impact our products have on current, and future technology markets."

Communities and Social Review

Making IQE a better place to work is one of our key focuses and the b-Heard survey identified that we need to more widely promote our charitable and community work.

Our 'Giving Something Back' Committee was formed to do just that and encourage wider engagement. The purpose of the Committee is to facilitate IQE's charitable and community engagement, and it is focused on a global approach to giving, but with local execution. The GSB Committee will be instrumental in taking feedback from our employees and driving initiatives and action on this topic.

Each site has a budget for which will be administered through a site champion. Employees can request funds on behalf of an organisation directly via the site champions, who will liaise with the site General Manager for approval.

Each employee is also eligible for one full or two half days of paid Giving Something Back time to be used for undertaking a volunteering activity. This way IQE's support can reach where it is needed most.

Throughout 2021 IQE staff participated in wide variety of activities in their local communities. These included but were definitely not limited to the following:

Taiwan Blood Donation

In October, our Taiwan site hosted its first on-site blood drive. It was very successful, with 32 participants donating. Our employees in Taiwan hope to continue with this initiative, and IQE is offering incentives and ongoing support to those who wish to donate blood again.

Sponsorship of Newport Grass Roots Cricket Club

For the last three years IQE has been proud sponsors of Newport Grass Roots Cricket. We look forward to continuing to support all of Newport's young cricketers!

IQE Wafer Tech donation to MK ACT

At IQE's Wafer Technology site our staff participated in a holiday gift collection for MK ACT, a charity providing safe emergency accommodation in Milton Keynes for people and their children escaping domestic violence. The organisation was thrilled with the amount of gifts collected for the holiday season.

Pennsylvania 'Out of the Darkness' walk

Our staff in Pennsylvania participated in the American Foundation for Suicide Prevention's "Out of the Darkness" Walk held in Allentown in October. Funds were raised by staff to aid in suicide prevention education and survivor outreach programs.

Supply Chain

IQE is committed to acting professionally, fairly and with integrity in all our business dealings and relationships.

> **"We view our supply chain as an extension of our business and it is therefore critical that IQE's ethical standards are upheld by our partners. We have strong relationships with our strategic supply partners and recognise that our success relies on sharing capabilities and investing for growth alongside them."**
>
> **David Bishop**
> Head of Global Supply Chain

Our 'One IQE Management' philosophy reflects our core values and our ongoing commitment to doing business in a responsible manner.

Expectations from our suppliers serve as an extension of these principles and a shared commitment to responsible sourcing practices. Now more than ever, our suppliers are key partners and continue to play a critical role in helping us achieve our vision and goals. Just as IQE leaders and employees are working daily to be ethical, passionate, accountable, efficient, transparent and always learning, we expect our supplier partners to do the same.

2021 Supply Chain Review

From the grounding of the Ever Given container ship blocking the Suez Canal for six days, to rising COVID-19 cases driving labour shortages, to extreme weather events, there have been plenty of challenges for global supply chains in 2021. Despite all of this, we are pleased to report that once again in 2021, IQE did not experience any significant disruption at any of our global sites. Over the past year IQE has continued with its focus on strengthening our strategic partnerships with key vendors, driving our supply chains to become more integrated at both a global and local scale.

We have also been focused on minimising the impact of escalating costs driven primarily by raw material commodity pricing, transport costs, energy prices and inflation. As a result of our focus on strengthening our strategic partnerships and taking the opportunity to review some of our contract commitments early, and ahead of price rises, we have been able to minimise the impact of these pressures on IQE's business.

2021 has been a demanding year for IQE's supply chain but our continued focus on strengthening our supplier relationships and sourcing strategies has successfully limited any disruption.

Read more at
iqep.com/responsibility/supply-chain/

Anti-bribery and corruption

IQE maintains a zero tolerance approach against bribery and corruption. We have an established anti-bribery and corruption policy, which includes guidance on the giving and receiving of gifts and hospitality. A Gifts and Hospitality Register is also maintained to ensure transparency. Our anti-bribery and corruption policy applies throughout the Group and was updated in 2020 and is supported by appropriate training which was updated in 2021.

Whistleblowing

IQE offers staff a confidential reporting mechanism, overseen by the Group's General Counsel & Company Secretary, which enables employees to raise concerns of malpractice, non-compliance or unethical conduct. The options for raising concerns are widely communicated to employees and are clearly set out in our Whistleblowing Policy.

Confidentiality

Maintaining confidentiality is engrained in our culture. Our policy and practice ensure that all staff fully understand what constitutes confidential information and restrict internal access on a need to know basis. Information relating to third parties is not disclosed without the third parties' written consent.

Human Rights and Anti-Slavery Statement

IQE is committed to respecting the human rights of all those working with or for us. We do not accept any form of child or forced labour and we will not do business with anyone who fails to uphold these standards. IQE has a zero tolerance approach to modern slavery and is committed to acting ethically and with integrity in all of its business dealings and relationships and to implementing and enforcing effective systems and controls to ensure modern slavery is not taking place anywhere in its business or in any of its supply chains. The Modern Slavery Act addresses the role of businesses in preventing modern slavery within their organisation and in their supply chains. IQE has developed and implemented policies to comply with the requirements of the UK's Modern Slavery Act and our Anti-Slavery Statement can be found at iqep.com

Read more at
iqep.com/responsibility

Intellectual Property

> "IP, particularly our know how and patents, is fundamental to our business. Understanding the alignment of our IP to our technologies and our customers' product offerings allows us to articulate and leverage the value more effectively."
>
> **Victoria Yeomans**
> Senior Patent Attorney

IQE's technology is underpinned by our intellectual property (IP) portfolio. We have c.250 granted patents, with 2021 yielding eight new grants and five new patent applications. We have [illegible] in the [illegible] along with a variety of registered trademarks.

Our patents cover all of our technology development areas, directed to our customers' products in mobile communications, IoT, data networks, augmented and virtual reality, automotive, healthcare and beyond. Our process know-how, the secrets of our trade which have been gained through more than thirty years of [illegible] experiences, is extensive and is closely protected by IQE.

With [illegible] processes to identify and review inventions in our technology development teams, we are able to harvest inventions efficiently and to make strategic decisions over those that we protect by patent and those we protect by trade secrets and confidentiality. Training of our staff ensures that everyone understands the value of our IP in our technology and products.

- [illegible] 16
- [illegible] 34
- [illegible] 4

IP portfolio per market application

Approach to Environment, Health & Safety

> **"Nothing is more important than protecting our people, our contractors and the communities in which we operate. We strive for strong levels of engagement with our employees so that collectively we can drive a proactive culture and a world-class HSE performance."**
>
> **Scott McKinnon**
> Health, Safety and Environment Director

During 2021, IQE increased its already considerable focus on the Environment, Health & Safety in order to drive the necessary improvements required to support our future ambitions.

A clear strategy for EHS improvements has been formulated and was formally approved by the IQE Board. During 2021 our EHS strategy focused on ensuring we have solid foundations in place as we continue to evolve our systems and processes in the coming years to achieve world class Health, Safety and Environmental performance.

What does world class performance mean to IQE?
Achieving world class Health, Safety & Environmental Performance means the development of an accountable culture where everyone working at IQE understands their own responsibility, whilst holding their colleagues accountable for their behaviours. This approach will be led from top management and fed down through every level of our organisation. A culture of respectful, positive challenge will be engendered and we will strive to ensure our systems and processes are robust, proportionate, understood and maintained in operation. A proactive reporting culture will exist, routine monitoring will be in place to ensure compliance is maintained and continuous improvement activities will be identified and implemented.

How will this be achieved?
A clear road map has been set out with focus areas defined year on year. The first two years are focused on cementing our current position, implementing strong foundations and putting clear structures in place. Years three and four aim the strong foundations set and are focused on evolution and continuous improvement. This strategy focuses on six key areas which all have associated actions as part of the road map to drive improvement year on year.

- Visible leadership – increasing the visibility and engagement of leaders in order to develop a positive culture.
- Governance – implementing robust governance processes for HSE.
- Compliance assurance – implementing robust compliance assurance processes.
- Competence – deploying a framework for demonstrable competence at all organisational levels.
- Learning organisation – deploying a framework to support sharing and learning from events and best practices across the organisation, and
- Continuous improvement – actively seeking out best practices internally and externally to drive continuous improvement across HSE. We will also regularly review our existing processes to identify opportunities for improvement.

Active Communication and Engagement – Zero is PossibleActive Communication and Engagement – Zero is Possible
Active communication and engagement at all levels in the organisation is vital to achieving our vision. In order to support this, a campaign has been devised which will run in two parts sequentially. The 'Zero is Possible' campaign has been launched and will focus firstly on keeping EHS topics at the forefront of our people's minds. Through targeted campaigns we will work to build mindsets within the organisation that EHS improvement is within reach.

This will be followed by the 'Zero Together' campaign which will focus on personal and collective ownership. By achieving this ownership we can strive to achieve our goal of Zero Occupational Safety, Environmental, Process Safety, Fire or Security incidents and also zero work related ill health. These campaigns will create the baseline for the EHS vision within the organisation and will focus on the key topics of engagement, reporting and sharing and learning. The campaigns will run in alignment with key elements of our year on year delivery plan, awareness campaigns and education programmes.

Zero is Possible – our approach to achieving zero injuries, safety events, environmental events, fire incidents and any work related ill health.

Responsible business

Environmental performance

IQE is actively engaged in developing technologies that support a sustainable world.

Approach to Environmental Protection

As an organisation we are committed to minimising our environmental impact and have a robust environmental management system in place to ensure compliance with regulations and to encourage waste reduction. During 2021 significant steps were taken to support these commitments.

IQE's Environmental Policy clearly provides a framework for ensuring key environmental *considerations are captured throughout our* business and in our key decision making processes. At IQE, we recognise that acting responsibly is not just good for the world, but actively contributes to the success of our business. IQE encourages all employees to reduce their impact on the environment, including through reducing waste, recycling, restricting unnecessary travel, saving water and reducing energy usage. We are focused on implementing best practice measures to minimise our environmental impact, and working with our supply chain to do the same.

Environmental Management System

IQE's Environmental Management System (EMS) is designed to the ISO 14001:2015 standard. This gives us a robust framework to enable us to meet Environmental Policy commitments and requirements for environmental compliance. All of IQE's operating facilities are third party certified to meet the ISO 14001:2015 standard.

Waste, Water, Soil and Air Management

As a global organisation, IQE's sites operate in jurisdictions with diverse environmental legislation. However, our core systems and processes ensure that the approach adopted across the organisation is consistent at all of our global sites. Each site operates continuous improvement programmes to reduce waste and to recycle and re-use wherever practicable. IQE also closely monitors the consumption of electricity, gas and water at all facilities, and looks for opportunities to improve energy efficiencies for new facilities, existing facilities, and facility expansions. A number of projects have been undertaken during 2021 to support this, including the installation of two new cooling systems in the UK and US to support the recycling of water and replace older, less efficient equipment.

During the year we have been working to ensure we understand the environmental operating parameters of our sites and that all measures are in place to ensure compliance. We recruited a new Group HSE Manager in the USA and felt it was a good time to baseline our position. To do this we engaged a specialist external organisation to review our environmental compliance across our US sites, and it is pleasing to report that they identified no major non-conformances. This baselining identified many best practices, and this has allowed us to evolve our systems where required and to share many learnings across the wider IQE team.

During 2021 we placed significant focus on reporting of EHS near misses and opportunities to improvement across the organisation. These 'free lessons' allow us to identify and act on any concerns before we actually have an incident or breach. It was pleasing that the number of environmental near misses/opportunities for improvement increased significantly during the year as a result of this promotion. The number of actual realised incidents also decreased from seven to two.

Reclaiming our scrap wafers

In 2021 we carried out a review of a number of our waste streams, successfully identifying a route for complete reclaiming of our scrap wafers. During our manufacturing process we naturally generate wafers which are not suitable to send to the end customer and in our UK and Asian facilities these wafers have historically been sent away as scrap. Recently we partnered with a company which can reclaim all of the raw materials from our wafers, for which we receive a fee, and these materials are able to be wholly reused in our supply chain. Across IQE globally this project has now diverted eight metric tonnes of waste.

GHG Emissions Summary

Total Greenhouse Gases (GHG) sources and emissions (metric tonnes CO_2 equivalent (tCO_2e))	2021
Stationary Sources	
Hydrofluorocarbons (HFCs)	
Purchased Electricity	
Total emissions:	23,772

Water Usage Summary

Total Water Use (cubic metres)	2021
Municipal Supply	
Recycled Water	
Purchased Water	
Total water use:	125,350

Waste Generation Summary

Total Waste Generated (tonnes)	2021
Landfill (Non Hazardous)	
Recycled	
Hazardous	
Energy	
Total waste generated:	1,828

Energy consumption summary

(kWh)	2021
Gas (kWh)	
Electricity (kWh)	
Transport Fuels (kWh)	
Energy consumption used to calculate emissions (kWh)	73,232,095

2021 Environmental Performance

Type	2020	2021
Environmental Incidents (Reportable)		
Environmental Incidents (Not Reportable)		
Near Miss Reports, Opportunities for Improvement		

Climate Change and Emission Reduction

IQE recognises that Climate Change is a key challenge facing the world, and consequently we have a responsibility to work to address it. During 2021 IQE engaged with an external organisation to independently verify our GHG emissions data. Through the Achilles Carbon Reduce programme, powered by Toitu Envirocare, the UK's only Accredited Greenhouse Gas Certification Scheme, we are being assisted to measure, manage and report our carbon footprint and drive business efficiency through carbon reduction. We received an internationally recognised ISO 14064-1 accreditation showing our review has been successfully completed and our data has been verified. This will now inform our future GHG emission reductions activity.

We saw a significant reduction in GHG emissions in 2021. This is likely resultant from a focus on renewable energy at our global sites, reducing GHG emissions from the generation of electricity. Additionally, this is the first time our GHG emissions data has been independently verified and certified to an ISO 14064-1 standard and so it is likely to be more accurate than previous years.

We also emitted 0 hydrofluorocarbons this year resulting from our capture systems. Wafer Technology, IQE's site in Milton Keynes, sent no waste to landfill in 2021.

2022 Focus

During 2022, equipped with our verified GHG inventory data, site specific plans will be evolved to focus on any areas of concern. This will include a review of all F gas emissions alternatives to higher risk substances. Additionally, an Environmental, Social and Governance ("ESG") Board Committee was formed to assist with the development and monitoring of IQE's ESG strategy as well overseeing the communication of the company's ESG activities with all stakeholders. This high level of oversight ensures IQE's Board is fully aware of environmental happenings within the business.

IQE's Milton Keynes site sent no waste to landfill in 2021.

Responsible business

Health and Safety Performance

Effective health and safety management is critical to the success of our business.

Near Miss/Opportunity For Improvement (H&S) Year by Year

	2019	2020	2021	2022 Target

* Including environmental reports

** Number of sites reducing from 10 to 4

We work hard to maintain and evolve our robust workplace safety programs and systems for controlling risk. The health and safety of our staff, contractor partners and visitors to our facilities, along with the environmental impact on the communities in which we operate, are our number one priority.

As previously mentioned, significant focus was placed on the identification and reporting of near misses and opportunities for improvement across our organisation. Engagement with this has been significant with reports received from all organisational levels and a number of these reports have been considered as being worthy of awarding the employees 'Spot Awards' as recognition of their importance.

Audit

In order to ensure the highest hazard elements of the businesses are being robustly managed, a new audit programme was launched during 2021 which focussed on one focus element each month that could be considered amongst our highest hazard areas. This has been an excellent tool for promotion of cross site sharing and learning.

2021 Health and Performance

IQE facilities report incidents, events and near misses on a weekly basis. All incidents are investigated to an appropriate level in order that we can learn from events and minimise the risk of repeat events. During the year "Incident on a Page" documents were developed for cascade of information around the Group. These are discussed at senior level on a quarterly basis and four sharing and learning sessions occur across the company per year to discuss these events.

Type	2021
Lost Time Injury	
All injuries	

In 2021 there were 21 injuries across IQE's operational sites, of which six of these resulted in work time being lost by the employee who was injured. All of these incidents were thoroughly investigated and actions taken to minimise the potential for re-occurrence, and all injured employees subsequently returned to work.

In 2021 there were 11,163 safety course completions across our global sites, an increase from 3,564 in 2020.

2022 Focus

Health & Safety Management System and ISO 45001

A key focus during 2021 was building the processes required to achieve the ISO 45001 Occupational Health and Safety accreditation across our operational sites. In Taiwan, ISO 45001 has already been achieved and the sites in Newport and Cardiff (IQE Europe) have undertaken the Stage 1 audit, with Stage 2 scheduled in the first half of 2022. Other IQE sites will begin the process in 2022, with the aim to attain certification early in 2023.

Process Safety

Process safety is a critical initiative for 2022. This work began during 2021 and will become embedded in the coming year. Process safety is a disciplined framework for managing the integrity of operating systems and processes that handle hazardous substances. Process safety events are high potential, low frequency as opposed to occupational safety events which tend to be more regular and less severe in outcome. The results of process safety failures can be catastrophic.

Other key activities

Many other activities are being undertaken to improve our systems and processes during 2022, with an additional focus being placed on Health and Wellbeing, and given the ongoing situation with COVID-19, we feel it is even more important to support employees who we may not see in person month to month.

2021 Performance

- Lost time injury
- Total injuries
- Total events (incidents, unplanned releases, LOC)
- Near miss reports

6

21

94

476

Stakeholder Engagement

Engagement with our stakeholders allows us to grow and execute our strategy. Our interaction and engagement with our key stakeholder groups is considered within the implementation of our strategy, which is overseen by the Executive Management Board and supported by the Board of Directors. We consider the impact we have on our stakeholders, as well as what our stakeholders consider important, when developing our plans for continued success. We have set out below our key groups of stakeholders, the issues and factors relevant to those stakeholders and how we have engaged with those stakeholders.

How the Board has engaged with shareholders, the workforce and other stakeholders

Stakeholder	Stakeholder description	Material issues
Customers	We provide the best advanced semiconductor materials solutions to our customers, supported by new product offerings and personalised customer support. We have a wide and diverse range of both corporate and academic customers across many different industries and end applications. Our product solutions support our customers to address some of the world's most pressing technological advancements.	• Consistently high quality products • High standard of business conduct • Product development support • Fair pricing • Excellent ongoing customer support
Employees	Our employees are fundamental to our business success. We continually invest in our people, developing the capabilities that we will need to succeed over the longer term. We are committed to being the company where the best in our sector want to work and strive to offer opportunities that will attract, motivate and retain talented employees, enabling them to give their best.	• Opportunities for personal development and career progression • Trust and encouragement to contribute to the business' success • Consideration of their health and wellbeing • Working as part of an inclusive and diverse culture
Investors and Shareholders	We place considerable emphasis on the maintenance of regular and open dialogue with our shareholders. Our goal is to deliver our investors and shareholders with returns through both organic and sustaining growth via the efficient use of capital.	• Current and future financial performance • Maximising opportunities for growth • Environmental, social and governance issues
Partners and Suppliers	We recognise the value of our partners and suppliers. Our suppliers [illegible] growth and efficiency. [illegible] added value.	• [illegible] • Product quality • Fair pricing • [illegible]
Society	[illegible]	• Local investment • [illegible] investment • [illegible]

Section 172(1) Statement

Engaging with our stakeholders and acting in a way that promotes the long-term success of the Group, while taking into account the impacts of our business decisions on our stakeholders, is central to our strategic thinking and our statutory duty in accordance with Section 172(1) of the Companies Act 2006. This constitutes our Section 172 Statement as required under the Companies (Miscellaneous Reporting) Regulations 2018.

The Board of Directors consider, both individually and collectively, that they have acted in a way that they consider, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole, having regard to the matters set out in Section 172 (a) to (f), in the decisions taken during the year.

Recognising that companies are run for the benefit of their shareholders, but that the long-term success of a business is dependent on maintaining relationships with stakeholders, the Board continuously reviews which relationships support the generation and preservation of value in the Company. These relationships include those with our customers, employees, investors and shareholders, partners and suppliers and society.

As a Board, our intention is to behave responsibly and ethically at all times, in line with our Company values, and to ensure that our management teams operate the business in a responsible manner and to the highest standards of business conduct and good governance. As we act in a way which reflects our values, we will contribute to the long-term success of the Company and continue to develop our reputation as a responsible and successful Company that delivers stakeholder value.

Further information as to how the Board has had regard to the Section 172 factors:

Section 172 Factor	Key Examples	Page
Consequences of any decision in the long term	• Consideration of how IQE generates long term value in the through development of our Business Model and Strategy	Page 16
Interests of employees	• Participation in Diversity, Equity and Inclusion planning for the business • Promotion of employee wellbeing initiatives and benefits awareness • Participation in Town Halls and employee forums	Page 21
Fostering business relationships with suppliers, customers and others	• Building strong relationships with customers and suppliers within the Group's supply chain which is essential for achieving the Group's long term strategic goals	Page 30
Impact of operations on the community and the environment	• Consideration of Environmental, Social and Governance improvement strategies • Review of environmental performance, ISO 14001 Environmental management system and emissions reduction initiatives	Page 33
Maintaining high standard of business conduct	• Promotion of responsible business operations, with a focus on the Group's Anti-bribery and Corruption, Confidentiality and Whistleblowing policies and Anti-Slavery Statement	Page 31
Acting fairly between members of the Company	• Shareholder engagement • Investor information and the Annual General Meeting	Pages 38

Our approach and appetite for risk

We recognise risks as an inherent part of our business operations and we approach risk with the same deliberate, strategic consideration as other *aspects of the business. The effective management* of risk contributes significantly to the successful delivery of the Group's strategic plans and objectives. The Group Risk Committee monitors the risk environment, in particular those identified as principal risks, on a regular basis while the Board is responsible for the overall stewardship of risk management and internal control. The Group Risk Committee considers risks using a top down and bottom up approach, with the Committee members obtaining input from around the business, which together with the oversight and support from the Audit & Risk Committee and the Board, creates an effective system for monitoring, planning and developing a Group wide approach and culture to risk. The Group Risk Committee will periodically report to the Audit & Risk Committee on the Group's principal risks and the mitigating actions being taken to address those risks.

The Group Risk Committee is responsible for the maintenance and regular updating of a risk register which articulates the Group's principal risks and the actions being taken to address those risks. The risk register is in a standardised format and includes the likelihood of a risk materialising, and an assessment of that risk both before and after the Group's mitigation activities.

Board

Reports to

Audit & Risk Committee

Works with

Group Risk Committee

Risk Reviews

- Regular reviews of Groups principal risks

Risk Assurance

- Specialist functions setting policies and performing reviews

Risk Register

- Group risk register maintained and reviewed by Group Risk Committee
- Sites, BU's & support functions provide specific risk registers for review

Bottom-up reviews

Operating sites, Business units, *Support Functions* , R&D

The Group continues to develop its risk management framework towards a 'Three Lines of Defence' model. The Group is focussed on establishing the necessary processes and internal expertise for the first and second lines of defence and will thereafter look to establish an internal audit function. In 2021 the Group continued to improve its first and second lines of defence through the recruitment of experienced subject matter experts and the development of its internal controls, policies and processes

Accountability

Three lines of defence model

Risk & Risk appetite → ① First line of Defence → ② Second line of Defence → ③ Third line of Defence → Oversight

Principal risks and uncertainties

The table below sets out the Group's principal risks and describes the likelihood, potential impact and the Group's mitigation measures for those risks. We have also identified the direction of change from 2020.

Principal risk and why it is relevant:	Risk likelihood and Trend:		Potential impact:
Major health and safety incident and/or major accident to the environment (MATTE). IQE operates in a highly controlled and regulated environment due to the nature of the materials used in its manufacturing processes	Medium ⊖	**Key Mitigation:** • Strong internal controls including technical and engineering control measures • Continuous improvement of health, safety and environment management systems • Continuous auditing and monitoring of production systems and equipment and close down of audit actions • Only trained and competent persons permitted to work with potentially harmful materials • ISO 14001 for all operational sites	**Potential impact:** High **Effect:** Harm to IQE's people or the environment, reputational damage, regulatory investigation and/or legal proceedings, fines and penalties
Loss of key people. IQE's people are fundamental to its success and IQE has a number of individuals in key roles	Low ⊖	**Key Mitigation:** • Competitive reward schemes including comprehensive benefits and all-employee share option scheme • Employee communication and engagement strategy • Talent development and retention plans • Succession management • Corporate processes and infrastructure	**Potential impact:** High **Effect:** Quality issues, production issues, technology development delays, wage inflation
Cyber security including loss from malware, malicious actions, accident and other unauthorised access	Medium ▲	**Key Mitigation:** • Investment in people, processes and technology • Third party vulnerability assessments, testing and close down of actions • Staff training and IT policies regarding use of IT and systems	**Potential impact:** Medium **Effect:** Operational disruption, loss of intellectual property, loss of data
Infringement or loss of IQE's intellectual property rights. IQE's intellectual property rights are a core element of its competitive offering	Medium ⊖	**Key Mitigation:** • Patent strategy • Proactive and rigorous defence of IQE's rights • Robust contractual confidentiality obligations and controls around the sharing of sensitive information • Internal controls to protect IQE's confidential information	**Potential impact:** High **Effect:** Degradation of IQE's competitive advantage, loss of market opportunity, significant legal fees

Key: ▲ Increased risk ▼ Decreased risk ⊖ No change to risk ◉ New risk

Our approach and appetite for risk

Principal risk and why it is relevant:	*Risk likelihood and Trend:*		*Potential impact:*
Breach of legal and regulatory requirements. IQE operates on a global scale and must ensure compliance with laws and regulations wherever we do business.	Medium	**Key Mitigation:** • Global monitoring of commercial arrangements and agreements • Global policies and procedures to ensure compliance with our legal obligations, particularly around health, safety and environment, taxation, export controls and anti-bribery and corruption laws • Global whistleblowing policy • Monitoring and reporting of legal and regulatory issues to the Audit & Risk Committee	**Potential impact:** High **Effect:** Harm to IQE's people or the environment, reputational damage, regulatory investigation and/or legal proceedings, fines and penalties
Changes in international export controls laws which impacts on IQE's ability to serve global markets	Medium	**Key Mitigation:** • Continued development of products and technologies which can be supplied to a number of different geographical markets in compliance with export control laws • Diversification of customers and products • Use of production equipment which is subject to lesser export control restrictions • Monitoring of changes in export control laws	**Potential impact:** High **Effect:** Loss of market opportunity and due to reduction in revenues and profit
Increasing competition or erosion of market opportunity from changing geopolitical environment and new market entrants attracted by high growth potential	High	**Key Mitigation:** • Ensure that IQE's products remain world leading through investment in opportunities identified in product roadmaps • Proactive customer engagement including direct engagement with end customers • Diversification through new markets, new products and new customers • Pursuing long term commitments from IQE's customers	**Potential impact:** High **Effect:** Loss of market share, price erosion, reduced sales volume and profitability
High level of customer concentration with the majority of IQE's revenues derived from a small number of key customers	Medium	**Key Mitigation:** • Customer diversification to reduce extent of reliance on key customers • Product diversification with existing and new customers • Market diversification through new growth market and new product opportunities • Strategy [illegible] across the market	**Potential impact:** High **Effect:** Risk of loss of market share, reduced volume and reduced revenues and profitability

Key: Increased risk Decreased risk No change in risk New risk

Principal risk and why it is relevant:	Risk likelihood and Trend:		Potential impact:
Insufficient cashflow generation to underpin any capital investment that might be needed to exploit business opportunities	Medium	**Key Mitigation:** • Capital structure strategy • Capital investment strategy including management of credit facilities • Long term business planning to determine investment priorities and phasing of investments • Cashflow forecasting and working capital management	**Potential impact:** High **Effect:** Inability to exploit opportunities and grow resulting in lower revenue and profitability
New products fail to deliver expected revenue and profitability	Medium	**Key Mitigation:** • Engaging with customers early in the product development lifecycle to align new product and technology development with customer requirements • Qualifying new products with customers and investment in capacity to support customer qualification and R&D • Maintaining a clear product roadmap which ensures that IQE remains at the forefront of new technology	**Potential impact:** High **Effect:** Lower than expected revenue and profit growth, reduced ability to invest.
Disruption or inflation in global supply chains	Medium	**Key Mitigation:** • Long term agreements with critical suppliers • Qualifying multiple suppliers • Capacity and stock planning • Forward buying of utility contracts	**Potential impact:** Medium **Effect:** Impacts on production resulting in lower revenue and profitability, increased cost of production

Key: Increased risk   Decreased risk   No change to risk   New risk

Risk Management

Principal risk and why it is relevant:	Risk likelihood and Trend:		Potential impact:
Transformation of IT systems, including Manufacturing Execution System, causes disruption to IQE's business	Medium	**Key Mitigation:** • Solution due diligence and vendor benchmarking • Senior stakeholder ownership, programme reporting and structured programme governance • Extensive planning on business change requirements and time commitments from SMEs	**Potential impact:** Medium **Effect:** Business disruption or escalating costs resulting in lower revenue and/or profitability
Insufficient liquidity or cash funding available to meet obligations as they fall due	Low	**Key Mitigation:** • The Group prepares regular financial forecasts to evaluate its funding and liquidity requirements for the foreseeable future. These forecasts are reviewed and approved by the Board. Based on these forecasts, appropriate funding and liquidity solutions are put in place in order to ensure that appropriate cash, liquidity and funding headroom is maintained to meet financial obligations as they fall due • On 30 December 2021 the Group refinanced its £25,000,000 ($35,000,000) multi-currency revolving credit facility from HSBC Bank plc. The facility terms for a 14 month period to 30 April 2023 and includes an option that requires HSBC Bank plc consent to extend for a further 12 month period to 30 April 2024. The Group has complied with all covenants associated with the facility which remained undrawn at 31 December 2021 • On 29 August 2019, the Group agreed a £30,000,000 five-year Asset Finance Loan facility from HSBC Bank plc of which £25,000,000 has been drawn. The Group has complied with all covenants associated with the facility with a balance of £16,595,000 remaining outstanding at 31 December 2021 • The Group's net debt (excluding leases) position of £5,801,000 remains low in the context of total available facilities of £55,900,000 and the Group's financial forecasts, in conjunction with the level of assessed covenant headroom on committed bank facilities show that the Group has adequate cash resources to continue operating and to meet its liabilities as they fall due for the assessed period to 31 December 2023	**Potential impact:** High **Effect:** Going concern risk and reputational damage

Russia & Ukraine conflict

IQE does not have any current business in either Russia or Ukraine and an assessment of our supply chains has determined that the conflict is unlikely to have a direct impact on IQE

Key areas of focus for 2022

- [illegible]
- [illegible]
- [illegible]

Coronavirus

The Coronavirus pandemic continued for much of 2021 and caused significant disruption to global markets, global supply chains and individuals [illegible]. At the onset of the pandemic IQE implemented a Business Continuity Committee to guide the Group's response to Coronavirus. The Business Continuity Committee continues to monitor risk indicators and external guidance and formulates [illegible] to the situation as it evolves.

As with 2020, [illegible] 2022 [illegible]

Long term viability

As required by provision 31 of the UK Corporate Governance Code 2018, the Board has assessed the prospects of the Company over a three year period, considering the Group's current financial position, business strategy and the results of it performing a robust assessment of emerging and principal risks (see pages 40 to 43).

The Board believes that a three year period is an appropriate time frame for assessing the Group's longer term viability. This period is covered by the Group's strategic planning horizon and considers the nature of the Group's principal risks. The Board believes that a three year period reflects a period of time over which information and forecasts concerning demand for the development, qualification and production of compound semiconductor wafers, is considered reasonably reliable. In making this assessment, the Directors have taken account of the Group's current funding arrangements and ability to raise new finance in most market conditions, if required.

The Board's key criteria for considering the Group's viability is the maintenance of a net cash position or the ability to operate within agreed debt arrangements, demonstrating that the Group would be able to meet its liabilities as they fall due. As at 31 December 2021, the Group has a net debt position, excluding lease liabilities of £5.8m and committed loans facilities of £55.9m.

In making this assessment, the Directors have considered the continuing growth in market demand for compound semiconductors, driven by the macro trends of 5G and connected devices, and are confident that the overall market and number of end use applications for compound semiconductors will continue to grow over the medium to long term. To ensure IQE continues to be well positioned to exploit this growing market, both in the short and longer term, IQE has developed a clearly defined technology and product roadmap that is supported by a combination of strategic consolidation of the Group's manufacturing sites, capital investment in manufacturing capacity and investment in next generation compound semiconductor research and development. The recently announced closure of Group's Pennsylvania (US) and Singapore facilities, with the resultant consolidation of molecular beam epitaxy capacity into the Group's North Carolina (US) site will deliver improved production efficiency and margins in the medium to long term whilst recent capital investment in manufacturing capacity at the Group's sites in Newport (UK), Massachusetts (US) and Hsinchu (Taiwan) provides capacity for growth that is aligned with the Group's technology and product roadmap.

Stress tests and scenario analyses to determine the Group's viability have been performed as part of the assessment. In performing those tests, the Group considered a number of scenarios linked to changes in forecast levels of growth within the Wireless and Photonics operating segments, changes to capital and technology research and development investment plans and the associated impact on, and availability of any required funding to support the Group's viability over its strategic three year planning period.

The Board confirms that it has a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three year period to 31 December 2024.

Going concern

In accordance with provision 30 of the UK Corporate Governance Code 2018, the Board considers it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Fair, balanced and understandable

The Board considers 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 position and performance, business model and strategy.

Financial review

The Group reports financial performance in conformity with UK adopted international accounting standards ("UK adopted IFRS") and provides disclosure of additional alternative non IFRS GAAP performance measures to provide further understanding of financial performance. Details of the alternative performance measures used by the Group including a reconciliation to reported IFRS GAAP performance measures are set out in note 5 to the financial statements.

The Group has experienced strong year on year growth in demand for wireless GaAs wafers (~20%) used in 5G handset power amplifiers and WiFi 6 routers in 2021. This is part of a multi year replacement cycle driven by a macro technological trend. This has been offset by a reduction in demand for wireless GaN wafers (~50%) for 5G infrastructure due to a slowdown in massive MIMO deployments, particularly in Asia when compared to 2020 and a reduction in VCSEL 3D sensing revenues (~20%). In combination with foreign exchange headwinds on a reported basis, this has resulted in a reduction in revenue of ~13.4% to £154,096,000 (2020: £178,016,000) which is equivalent to ~£165,000,000 at constant currency, which represents a ~7.3% underlying year on year reduction.

The Group's Wireless business segment represents the largest proportion of the Group's revenue accounting for 51.0% (2020: 52.9%) of total wafer sales with Photonics representing 41.2% (2020: 45.9%) and CMOS++ representing 1.8% (2020: 1.2%).

Wireless wafer revenues decreased 11.6% (5.5% at constant currency) to £83,217,000 (2020: £94,193,000). The decrease in wireless wafer revenue reflects a significant decline in wireless GaN epi wafer sales that has only partially been offset by increased sales of wireless GaAs epi wafers for 5G and WiFi 6. Demand for wireless GaN epi wafers has been weak due to end market dynamics, including significantly lower levels of massive MIMO base station deployments in Asia and the slow rate of deployments in Western markets. GaN epi wafers remain an essential material for 5G infrastructure and demand is expected to recover over the multi year deployment cycle. Demand for wireless GaAs epi wafers has continued to grow in 2021 despite some softening of demand in Q1, driven by 5G penetration of the smartphone handset market and WiFi 6 adoption which has resulted in high utilisation of manufacturing capacity at the Group's Taiwan facility where the Group has invested in eight new and refurbished tools which are currently being commissioned to support further growth in wireless GaAs epi wafer demand in 2022 and beyond.

Photonics wafer revenues decreased 16.6% (10.4% at constant currency) to £68,067,000 (2020: £81,627,000). The decrease in photonics wafer revenues reflects lower demand for VCSELs used in 3D sensing which has primarily arisen from a combination of unit design changes and softening in demand [illegible] supply chains towards the end of 2021 and as a result of lower other photonics product sales linked to a combination of factors including [illegible] of certain defence and security [illegible] associated with [illegible] programmes [illegible] to 2022 and the [illegible] of certain new products.

Statutory gross profit decreased from £33,150,000 to £17,611,000. The decrease in gross profit reflects a combination of lower trading volumes and a reduction in [illegible] gross profit margin percentage to 11.5% (2020: 18.6%) as the Group has experienced a reduction in utilisation of manufacturing capacity at some of its sites [illegible] year. Adjusted gross profit, which excludes the charge for share based payments, decreased from £33,327,000 to £18,771,000 with a decline in gross margin from 18.7% to 12.2%.

Selling, general and administrative ("SG&A") expenses increased from £31,637,000 to £37,699,000. Adjusted SG&A, which excludes adjustments for share based payments, restructuring costs, Chief Executive Officer recruitment costs and [illegible] decreased from £27,759,000 to £25,302,000. The decrease in adjusted SG&A primarily [illegible] cost savings and reductions [illegible] that have been [illegible] current year [illegible].

As part of the Group's global footprint optimisation plan restructuring costs totalling £3,681,000 (2020: £162,000) have been incurred relating to costs associated with the announced closures of the Group's manufacturing facilities in Singapore and Pennsylvania, USA. Within the restructuring costs are £3,020,000 (2020: £nil) relating to a combination of site decommissioning and employee related costs in Singapore and £661,000 (2020: £162,000) relating to employee related costs in Pennsylvania, USA. These site closures are part of the Group's global footprint optimisation plan.

Chief Executive Officer recruitment costs of £741,000 (2020: £nil) include settlement costs and legal fees of £318,000 associated with the transition of the former Chief Executive Officer to a non-executive role and external recruitment fees of £423,000.

Impairment of intangibles of £7,411,000 (2020: £6,537,000) relates to the write down in value of the Group's cREO™ tile technology development cost and patent assets totalling £1,693,000 (2020: £nil) and the impairment of Photonic quasi crystal technology related development costs and patent assets totalling £2,718,000 (2020: £nil) where the Group has taken the decision to pause development related activities given the current lack of visibility over the timeline to commercialisation of each of the technologies.

A reported operating loss of £19,978,000 has been incurred (2020: Loss of £5,517,000). Reflecting the adjustments noted above, an adjusted operating loss of £6,151,000 in 2021 compares to an adjusted operating profit of £5,386,000 in 2020 with the loss in 2021 principally reflecting the impact of the decline in year on year revenue. The segmental analysis in note 4 reflects the adjusted operating margins for the primary segments (before central corporate support costs). Wireless adjusted operating margins and photonics operating margins declined from 12.1% and 11.1% in 2020 to 9.8% and 2.6% in 2021, primarily reflecting reductions in volume and the associated under utilisation of certain manufacturing capacity.

Finance costs have remained broadly consistent year on year at £2,213,000 (2020: £2,165,000) and reflect £905,000 (2020: £949,000) of bank and other interest costs primarily related to the Group's HSBC Bank asset finance facility and the interest expense on lease liabilities of £1,308,000 (2020: £1,216,000).

The tax charge of £8,811,000 (2020: £1,001,000 credit) consists of a current tax charge of £1,124,000 (2020: £1,132,000) primarily relating to taxable profits generated by the Group's Taiwanese operations and a deferred tax charge of £7,687,000 (2020: £2,133,000 credit) which principally reflects the partial reversal and derecognition of previously recognised UK and US tax losses. Deferred tax asset recognition has been restricted in the UK to reflect future forecast profitability, an assessment that includes the impact of the Group's consolidation and investment in central and functional roles in the UK whilst US deferred tax asset recognition has been restricted in the US to reflect lower future forecast profitability resulting from a combination of the Group's consolidation of its US manufacturing operations and the continued shift in the balance of future forecast manufacturing and/or profits from the Group's US operations to the UK and Asia population. The effective tax rate of 13.3% (2020: 21.4%) associated to the tax charge of £1,803,000 (2020: £1,520,000) on adjusted profits is less than the UK statutory tax rate of 19% primarily due to the non recognition of deferred tax assets for current year UK, US and Singapore trading losses which include the adjusted Chief Executive Officer recruitment and Singapore and Pennsylvania site closure costs.

The increase in the loss for the year to £31,002,000 (2020: £2,893,000) reflects a combination of the decline in revenue in the wireless and photonics business segments, reduced profitability within both segments as the Group has experienced an increase in under utilisation of manufacturing capacity and the impact of adjusted non cash and other non operational items which at an adjusted level, has reduced the loss to £19,281,000 (2020: £2,702,000 profit).

Basic and diluted loss per share has increased from a loss per share of 0.41p to a loss per share of 3.87p in the current year with adjusted basic loss per share of 2.41p (2020: 0.29p earnings) and adjusted diluted loss per share of 2.41p (2020: 0.29p earnings) reflecting the Group's loss at a statutory and adjusted profit level.

Cash generated from operations decreased in the year to £18,883,000 (2020: £35,457,000) reflecting the Group's reduced trading performance partially offset by strong management of working capital. The Group has continued to invest in growing capacity to meet demand with capital expenditure of £15,051,000 (2020: £1,993,000) principally focused in Taiwan to support future forecast growth in wireless GaAs epi wafer demand. Intangible asset expenditure of £345,000 (2020: £731,000) focused on a combination of intellectual property and the Group's multi year strategic IT transformation programme and investment in targeted capitalised technology development of £2,994,000 (2020: £4,678,000).

The decrease in cash generated from operations, combined with investing activity cash costs of £18,305,000 (2020: £10,102,000), repayment of bank borrowings of £6,145,000 (2020: £7,030,000), repayment of lease liabilities (including interest) of £5,013,000 (2020: £3,761,000) and payment of other financing costs of £1,792,000 (2020: £1,363,000) associated with the minority acquisition of the minority interest in the Group's Taiwanese subsidiary IQE Taiwan ROC have combined to reduce the Group's cash balances from £24,663,000 in 2020 to £10,791,000 in 2021 resulting in a full year net debt position of £5,804,000 (excluding lease liabilities) compared to a net funds position of £1,923,000 (excluding lease liabilities) in 2020.

Equity shareholder funds total £231,621,000 (2020: £260,135,000) with the movement from 2020 primarily reflecting the loss for the year, the impact of the dilution of the prior year acquisition of the Taiwanese minority interest and foreign exchange differences arising on the retranslation of net investments in overseas subsidiaries.

Tim Pullen
Chief Financial Officer

20 March 2022

Board of Directors

Strong governance and leadership

Phil Smith CBE, FREng, FIET (64)
Chairman

Phil Smith joined the IQE Board in 2016 and took over as Chairman in April 2019 and Executive Chairman from September 2021 to January 2022.

Previously he has been appointed Chairman of Cisco for the UK in 2015 after eight years as Cisco's Chief Executive. He is also the Chairman of Innovate UK and Chairman of the Tech Partnership. Additionally, he sits on the board of the National Centre for Universities and Business (NCUB). Mr Smith has a thirty-five year track record in the technology industry in leading companies including Philips Electronics and 3M. As Chief Executive and now Chairman of Cisco he leads around 5,000 people in the UK and Ireland. He created Cisco's British Innovation Gateway (BIG) programme [illegible] London 2012 to [illegible] nationwide ingenuity, ambition and growth through technology entrepreneurship. In September 2014 he was awarded an Honorary Doctorate by Birmingham City University, cited for his outstanding contribution to the IT industry as a leader amongst leaders. In March 2015 Mr Smith was awarded an Honorary Degree of Doctor of Laws by the University of Warwick and in 2016 an Honorary Degree of Doctor of Science by [illegible] University. He was honoured in the [illegible] Queen's Birthday Honours List with the award of Commander of the Order of the British Empire (CBE) for services to Technology, Business and Skill.

Committee Membership
E N R

Americo Lemos (54)
Chief Executive Officer

Americo Lemos joins IQE from the executive team at GlobalFoundries Inc., a New York headquartered semiconductor designer and manufacturer.

Americo Lemos joined IQE in January 2022 from the executive team at GlobalFoundries, one of the world's leading semiconductor manufacturers. As GF's Senior Vice President of Business Development for Asia Pacific and China Country President, Americo was responsible for driving the business's efficiency and growth in the Asian market. Prior to this he was Senior Vice President at Qualcomm, responsible for its data center business. Before joining Qualcomm, Mr Lemos was Vice President of Platform Engineering at Intel, responsible for strategic ventures with Chinese semiconductor companies from 2009 to 2013. Before Intel he held leadership roles with Texas Instruments, Qualcomm, Conexant, Marvell and Skyworks. Mr Lemos holds a Master of Sciences, Electronics and Computers degree from Ecole Nationale Supérieure de Sciences Appliquées et de Technologie (ENSSAT) in Lannion, France.

Committee Membership

Tim Pullen BA, ACA (44)
Chief Financial Officer

Tim Pullen joined IQE as the Chief Financial Officer in February 2019. Prior to this, Mr Pullen was the Chief Financial Official of Arm Limited, a global semiconductor and software design company owned by Softbank Group.

Before joining Arm he was Finance Director at O2 Telefónica UK where he held a variety of senior financial positions including responsibility for Technology Operations, B2B and Digital segments, and Revenue Operations. In connection with his time at O2, Mr Pullen also held roles as a Non-Executive Director of Tesco Mobile, O2's joint venture with Tesco Mobile, and was a Director of Cornerstone Telecommunications Infrastructure Limited, O2's network sharing joint venture with Vodafone. Tim has also worked in a number of technology and service businesses including Serco Group and Dell. Mr Pullen is a Chartered Accountant and qualified with Ernst & Young.

Committee Membership

Dr Drew Nelson OBE, BSc, PhD, FREng (67)
President and Non-Executive Director

Dr Drew Nelson has over 30 years experience in the semiconductor industry in a variety of research and managerial positions.

Following a PhD in Semiconductor Physics, he joined BT Research Laboratories in 1981, leading the group responsible for the development of advanced optoelectronic devices for optical fibre communications. He subsequently managed the technology transfer from BT to Agilent for mass production. He co-founded EPI in 1988 which became IQE in 1999 and was appointed Chief Executive Officer of IQE plc in April 1999 until January 2022. Dr Nelson has held several Non-Executive Director and Chair roles and serves on several Government and industry bodies. He received an OBE in 2003 for services to the electronics industry. He is currently a member of the High Level Group appointed by the EC to oversee the implementation of Key Enabling Technologies (KETs) throughout Europe.

Committee Membership
E

A Audit Committee Member **R** Remuneration Committee Member **N** Nomination Committee Member

E Environmental, Social & Governance Committee member ◯ Chair of Committee

Carol Chesney FCA (59)

Senior Independent Director

Carol Chesney joined IQE's Board in May 2019 and was appointed as a Senior Independent Director in November 2020.

Since October 2012 Mrs Chesney has served as a Non-Executive Director and Chair of the Audit Committee of Renishaw plc. In addition, she is a Non-Executive Director and Chair of the Audit Committee of Imagination Technologies, Hunting plc and Biffa plc. Until 2018 Mrs Chesney served as the Company Secretary of Halma plc, a FTSE 100 health, safety and environmental technology group having also served as the group's Financial Controller. During her time at Halma Mrs Chesney's role included corporate governance, legal compliance, equity incentives, pensions, internal audit management, taxation, property, health and safety compliance, environmental reporting and anti-bribery and corruption compliance. Mrs Chesney is a Fellow of the Institute of Chartered Accountants in England and Wales, and qualified with Arthur Andersen in the UK.

Committee Membership

Ⓐ R N

Victoria Hull (59)

Non-Executive Director

An experienced Non-Executive Director, Victoria Hull is currently serving Non-Executive Directorship and Remuneration Committee roles for listed technological companies including Alphawave IP Group plc and Network International Holdings plc.

Victoria is also the Senior Independent Director for Ultra Electronics Holdings plc. Prior to these appointments, Victoria held an executive directorship at Invensys, now Schneider Electric. Having worked in a variety of global companies at Executive Committee or Board level, her appointment to the Board of IQE brings an extensive understanding of legal, commercial and governance matters. Victoria has a strong background in corporate finance and began her career as a trainee solicitor at Clifford Chance LLP.

Committee Membership

Ⓡ N A

Sir Derek Jones KCB (69)

Non-Executive Director

Sir Derek Jones KCB is Chair of Keolis UK, the international transport company; he is also Chair of the Prince's Trust in Wales.

He is also an independent adviser at Cardiff University, where he is an Honorary Fellow and Professor, and a Vice President of Cardiff Business Club. Sir Derek was the Permanent Secretary of the Welsh Government until February 2017. Sir Derek spent the earlier part of his government career in Whitehall working at HM Treasury and the Department for Trade & Industry, where he headed the Far East Trade Desk. In government in Wales he also served as Director of Finance and Director of Economic Affairs, during which time he was instrumental in securing major inward investment projects, particularly from Japan and the USA. Outside government Sir Derek was Director of Business & Strategic Partnerships at Cardiff University, responsible for securing long-term collaboration with the private sector. He was made Companion of the Order of the Bath (CB) in 2009 and subsequently Knight Commander (KCB) in 2014, for services to economic and social conditions. Sir Derek is also the Director responsible for employee engagement.

Committee Membership

E R N A

Corporate Governance

Corporate Governance

Chairman's Governance Overview

Dear Shareholders,

I am pleased to introduce IQE's Governance Report on behalf of the Board. The Board is collectively responsible for IQE's long term success and hence committed to conducting business responsibly, maintaining high standards of corporate governance and to aspiring to the highest levels of quality in everything it does. I'm confident the Board's continued focus on these areas will support IQE's performance, its position in the market and enable it to grow and respond to opportunities as they arise. We have recently incorporated the Environment, Social and Governance Committee to develop and monitor IQE's ESG strategy and to be responsible for communicating our ESG activities with our stakeholders. We look forward to bringing you updates later this year.

The Board is committed to driving IQE's long term objectives and to overseeing IQE's operations to ensure competent and prudent management. The approach to governance is set by the Board, charging the Executive Leadership Team with the responsibility to ensure that the approach is effectively implemented across IQE's global business. It has been my privilege to lead the Board through a period of change through 2021 which I believe will strengthen the business through the coming important years. The Board and the Executive have rightly been intensively focused during these tough times on the resilience of our people, our business and the way in which we interact with the societies in which we live and operate.

Board changes in 2021

On 22 November 2021 we announced that Americo Lemos had been appointed as IQE's new Chief Executive Officer, starting on 10 January 2022. Americo succeeds Dr Drew Nelson who completed his transition to his new role as President and Non-Executive Director on 30 October 2021. During Drew's transition and prior to Americo joining IQE I acted as interim Executive Chair from 7 September 2021 to 9 January 2022.

The Board also said farewell to Sir David Grant who retired from the Board and his position as Remuneration Committee Chair on 18 September 2021 having been on the Board since September 2012. David made a huge contribution to IQE over many years and had been an extremely effective member of the Board. Victoria Hull was appointed as a Non-Executive Director on 1 August 2021 and succeeded Sir David as the Remuneration Committee Chair on his retirement. Victoria has a broad range of experience and is already making a strong contribution to the Board and the Remuneration Committee.

Sir Derek Jones has been selected as the Board's director for responsible for employee engagement. Derek will work with the rest of the Board and the Executive Leadership Team in developing the right communication channels for this important responsibility. We also announced the creation of an Environmental, Social and Governance Committee which I am pleased to chair and which will also comprise Derek and Drew as additional members. Derek will report to the ESG Committee on employee engagement matters.

During the year, I agreed with the Board that we would carry out an internal evaluation of the Board. I am pleased to confirm that we continue to have a committed, engaged and effective Board that is operating well. I am confident that recent changes to the Board will only improve its effectiveness. More details on the findings from the evaluation are outlined on page 53. We continue to review the Board's effectiveness and will look to continuously improve the Board's functions as it guides IQE.

I encourage all of our shareholders to engage with us ahead of the AGM which will be held on 28 June 2022. Notice of and details of the arrangements for the AGM will be provided to shareholders at the usual time and will take account of legislative requirements, external circumstances and the protection of the health and safety of our employees and shareholders.

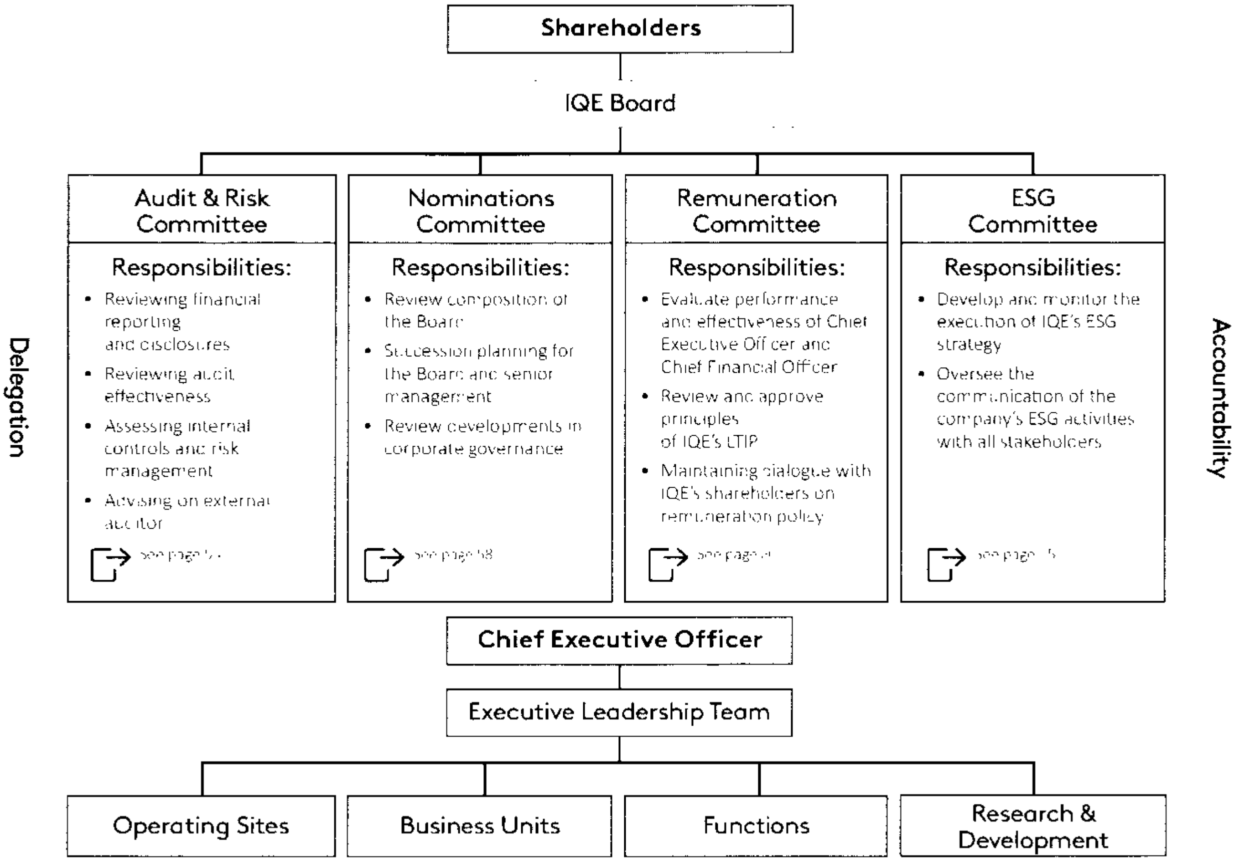
I am confident that the steps we have taken through 2021 will make a strong positive contribution to IQE as we drive to achieve the vision and goals we have set ourselves. I am delighted that Americo has joined IQE as its new Chief Executive Officer and look forward to seeing his positive impact on the business.

Phil Smith
Chairman, IQE plc

29 March 2022

Corporate Governance

Governance structure



Role of the Board

The Board is responsible for the overall conduct of IQE's business and the Directors have responsibilities under both the Company's Articles of Association and UK company law. The Board delegates day to day management of IQE's to the Chief Executive Officer and the Executive Leadership Team.

The main tasks of the Board in 2021 included:

Strategy

- Reviewed, challenged and approved the Group's strategy for the period 2022 to 2024
- Regular reviews of key business decisions and their impact on the Group's strategy

Operations

- [illegible]
- Monitored performance and provided challenge [illegible]

Leadership and people

- Concluded the search for a new Chief Executive Officer
- Concluded the search for a new Non Executive Director and Chair of the Remuneration Committee

Finance

- Monitored progress against the 2021 financial plan
- Reviewed and approved the financial plan for the period 2022 to 2024
- Monitored, challenged and approved [illegible] capital expenditure
- Approved the Annual Report, half year results and other [illegible] updates
- Considered and approved IQE's going concern and viability statements

Governance and ethics

- Carried out an internal Board evaluation, discussed the outcome with the Board and agreed areas for improvement
- Received and reviewed feedback from institutional investors
- Reviewed the requirements of the 2018 UK Corporate Governance Code and [illegible] conformity
- [illegible] Non Executive Directors [illegible]

Board and Committee attendance

	Board	Audit & Risk Committee	Remuneration Committee	Nominations Committee
Number of meetings in 2021	11	4	3	3
Attendance				
Executive	11			
Dr A W Nelson	14			
Mr Tim Pullen				
Non-Executive				
Mr P Smith	11	4	3	3
Mrs Carol Chesney	11	4	3	3
Sir D Grant	9	3	2	2
Sir D Jones	11	4	3	3
Ms V Hu	7	2	1	1

1 Drew Nelson ceased his role as CEO on [illegible] and subsequently attended meetings in the role of Non-Executive Director.

2 David Grant retired from the Board in September 2021 and attended all available meetings prior to this time.

3 Victoria Hu was appointed as a Non-Executive Director [illegible] 2021 and attended all available meetings following her appointment.

Diversity

Independence

The Board considers that, with the exception of Andrew Nelson, all of the Non-Executive Directors are independent in character and judgement and free from any business or other relationship that could materially interfere with exercising that judgement. Andrew Nelson was recently appointed as President and Non-Executive Director following his transition from Chief Executive Officer.

The Board is also satisfied that there is no compromise to the independence of, and nothing which would give rise to conflicts of interest for, those directors who serve as directors on other company boards or who hold other external appointments. The Board considers potential for conflicts of interest at every Board meeting and ensures that directors present sufficient information for those to be reviewed.

Appointment and time commitment

The Chairman and each of the other Non-Executive Directors have letters of appointment.

The Chairman's letter of appointment sets out the time commitment expected of him. The other Non-Executive Directors' letters of appointment set out a minimum expected time commitment but do not set out a fixed time commitment. The Non-Executive Directors are expected to allocate adequate time to IQE to perform their duties and to make themselves available for regular and ad hoc meetings. The Board believes each of the Non-Executive Directors has sufficient time to perform their duties.

Board evaluation

The Chair and Company Secretary facilitated an internal review of the Board during 2021. The process involved the use of an externally facilitated platform which gathered feedback on a range of areas including the Board's composition, processes, behaviours and activities. Feedback was provided on an anonymised basis to encourage open and honest responses. The Chair held a number of open conversations with the Board members on an individual and collective basis to discuss their feedback. Positive feedback was received on the progress the Board was making on areas such as governance structures, Board objectives, quality of conversations and discussion. We identified a number of areas that required attention and will continue to evolve the effectiveness of the Board over the coming year. We have made significant progress in succession plans for key leadership positions and evolved the composition of and the skills within the Board. The Board considers that it is well placed to play a broader role in the establishment of a culture for the evolution and next generation of IQE. The Board made meaningful progress in its equality, diversity and inclusion and the recent establishment of the ESG Committee will help guide our journey in these important areas. The Board is working closely with the new CEO to drive value creation.

UK Corporate Governance Code compliance

IQE complied throughout 2021 with the principles and provisions of the UK Corporate Governance Code 2018 except in the following areas:

Provision 5

IQE has a people forum and regular 'Town Halls' which senior management use for engagement with the workforce. Sir Derek Jones was appointed as IQE's first Non-Executive Director responsible for employee engagement on 24 January 2022.

Provision 17

IQE does not currently maintain a succession plan for the Company Secretary or for senior management immediately below Board level. IQE will work to develop such plans based on merit and objective criteria. As part of its consideration of developed succession plans, the Nominations Committee will consider the linkage of its diversity objectives with company strategy and the gender balance of those in senior management and their direct reports.

Provision 33

The Remuneration Committee has responsibility for determining the policy and setting remuneration for the Executive Directors and the Chairman. It also has responsibility to recommend and monitor the level and structure of remuneration for senior management. However, the Remuneration Committee does not currently determine the policy and set the remuneration for senior management and the Company Secretary as required by the Code.

Provision 36

Share options granted to the Executive Directors under IQE's LTIP are subject to total vesting and holding periods of 3 years. In addition, Executive Directors are subject to a minimum holding requirement equal to 200% of their base salary and will have a post-employment shareholding requirement for 2 years. The minimum holding will be equal to 200% of base salary in the first year post employment, reducing to 100% of base salary in the second year.

A copy of the 2018 UK Corporate Governance Code is available at frc.org.uk

Corporate Governance

Audit & Risk Committee Report

Audit & Risk Committee Chairman's Introduction

"IQE's Audit & Risk Committee continued its oversight of IQE's system of internal control ensuring that certain elements of control and reporting evolved in accordance with the business's evolution and the maturity of operations. We understand the areas where further enhancements are targeted and will ensure these are advanced on a timely basis. The Audit & Risk Committee has developed good foundations over the past few years and I look forward to continuing that development with my colleagues."

The Board considers the maintenance of high standards in its governance and management of the affairs of IQE as fundamental to the discharging of its stewardship responsibilities. Accordingly, both the Board and the Audit & Risk Committee continue to keep under review IQE's whole system of internal control which comprises not only financial controls, but also business & operational controls, compliance and risk management.

In 2021 the Committee placed additional focus on IQE's principal and emerging risks, with a continued emphasis on those arising from the global COVID-19 pandemic and the resulting global economic turbulence. The Committee spent a significant amount of time with IQE's internal finance function and external auditors discussing, assessing and challenging financial reporting and going concern assessments. The Committee continues to assess IQE's internal controls and monitors the need for the establishment of an internal audit function. The Committee used its structured meeting schedule to ensure that it provides robust challenge in the areas relating to financial reporting, internal controls and risk management, the external auditors and other issues pertinent to IQE.

Sir David Grant retired from the Board on 16 September 2021 and stepped down from the Audit & Risk Committee on the same day. Victoria Hull was appointed to the Board on 1 August 2021 and joined the Audit & Risk Committee at the same time. The Committee reviewed its effectiveness and terms of reference during the year and determined that it continues to perform effectively.

Carol Chesney
Chair

29 March 2022

Role of the committee

The Audit & Risk Committee is responsible for monitoring the effectiveness of IQE's financial reporting, internal controls and risk management systems and processes and the integrity of IQE's external auditors.

Key responsibilities

- reviewing the effectiveness of IQE's financial reporting, internal control policies and procedures for the identification, assessment and reporting of risk
- reviewing significant financial reporting issues and judgements
- monitoring the integrity of IQE's financial statements and any formal announcements relating to IQE's financial performance
- keeping the relationship with the external auditors under review, including their terms of engagement, fees and independence
- reviewing and monitoring the need to establish a dedicated internal audit function
- advising the Board on whether the Committee believes the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess IQE's performance, business model and strategy
- conducting the tender process and making recommendations to the Board, about the appointment, reappointment and removal of the external auditor and approving the remuneration and terms of engagement of the external auditor
- reviewing and monitoring the external auditor's independence and objectivity
- reviewing the effectiveness of the external audit process, taking into consideration relevant UK professional and regulatory requirements
- developing and implementing policy on the engagement of the external auditor to supply non-audit services, ensuring there is prior approval of non-audit services, considering the impact this may have on independence, considering the relevant regulations and ethical guidance in this regard, and reporting to the Board on any improvement or action required
- reporting to the Board on how it has discharged its responsibilities

Membership

Carol Chesney – Chair

Derek Jones

Victoria Hull

Carol Chesney is chair of the Audit & Risk Committee. Carol is a Chartered Accountant and has also held a number of senior finance roles. The Board is satisfied that Carol is the Committee member with recent and relevant financial experience as required by the UK Corporate Governance Code 2018. The Board is also satisfied that the Committee as a whole has a mix of experience and competencies to assess the issues facing the Group within the semiconductor industry.

Meetings and attendance

The Audit & Risk Committee meets at least quarterly with additional meetings as required. There were four meetings in 2021 and all of the Committee members attended each meeting.

The meetings are also regularly attended by the Chairman, Chief Executive Officer, Chief Financial Officer and other senior members of the finance team. IQE's external auditors attend every quarterly meeting and time is allowed at the end of each meeting for the Audit & Risk Committee to discuss issues with the external auditors without management being present.

Corporate Governance

Audit & Risk Committee Report continued

Activities during 2021

The Committee continues to oversee a range of risk areas that are key to IQE's long term success and compliance with applicable laws and regulations.

The majority of the Committee's work derives from a structured programme that is designed to fulfil its responsibilities as outlined in its terms of reference. The table below summarises the key activities at each meeting during 2021.

Agenda item	March	May	September	December
Review financial performance with focus on liquidity and covenant strength	•	•	•	•
Review of financial statements, going concern assumption and compliance with accounting standards	•		•	
Review and recommend for approval year end and half year announcements	•		•	
Review of significant accounting issues and material judgments	•		•	
Review of key business risks	•		•	
Consider requirements for internal audit function				•
Consider any material breach of law	•	•	•	•
Review whistleblowing policy and procedures for preventing fraud, bribery and corruption			•	
Review of insurance programme, policies and material judgments			•	
Review representation letter for full year and half year	•		•	
Review effectiveness of Audit & Risk Committee				•
Review of auditor quality and independence		•		
Consider audit effectiveness		•		
Review accounting and corporate governance developments		•		•
Committee only meeting with external auditor	•	•	•	•

The UK Corporate Governance Code 2018 requires the Directors to prepare the Annual Report and Accounts and to state that they consider them, taken as a whole, to be fair, balanced and understandable and provide the information necessary for shareholders to assess IQE's position and performance, business model and strategy. The Board requested that the Audit & Risk Committee advise it as to whether the Annual Report and Accounts meet those requirements. This work formed part of the review of the draft financial statements that was undertaken by the Committee in March and September 2021.

Through consideration of reports from and meetings with management and the external auditors, the Committee has reviewed and determined the following:

- judgmental areas and whether revenue recognition and the provisioning policies have been applied consistently and the level of any provisions remains appropriate;
- whether the expected future cash flows of IQE support the carrying value of goodwill and whether there are any triggering events which suggest any potential impairment of other intangible assets, including the valuation of development intangibles and the capitalisation of development costs;
- whether the presentation of the financial statements, including the presentation of adjusted performance measures, is appropriate and balanced.

Through consideration of reports by independent tax specialists advising on IQE's tax affairs in the UK, the US, Taiwan and Singapore [illegible] and consideration of [illegible] and meetings with management [illegible] current and deferred tax accounting, the Committee has reviewed and determined whether the provision for tax liabilities and the current and deferred tax accounting is appropriate.

[illegible] IQE [illegible] IQE's trading and cash flow forecasts together with [illegible] assess the [illegible] of the going concern assumption.

- Going concern and the appropriateness of the disclosure contained within the significant accounting policies note relating to the application of the going concern basis of accounting in the financial statements;
- Compliance with financial covenants contained within the Group's committed bank facilities and the associated availability of the Group's bank facilities;
- Goodwill impairment and the growth rates applied in the Wireless and Photonics value in use calculations that support the carrying value of goodwill;
- Intangible development cost carrying values and associated markets, end use applications and customer demand for the technology which support asset carrying values;
- Deferred tax asset recognition and the application of the cash flow forecasts used in the Group's goodwill impairment review as the starting point for the assessment and recognition of deferred tax assets; and
- Presentation and disclosure of adjusted profit measures, including appropriate clarity of reconciliations between GAAP and non-GAAP measures.

External Auditors

The Audit & Risk Committee has developed an audit independence policy. In accordance with the policy, the Committee oversees the relationship with the external auditor and approves all services provided by them and all fees payable to them. This is to ensure that potential conflicts of interest are considered and that an independent, objective and professional relationship is maintained.

The Committee has reviewed the [illegible] Ethical Standard 2019. From 1 January 2021, the Group [illegible] The [illegible] 2021 and the amounts paid to them are disclosed.

Significant matters relating to the financial statements

The Committee [illegible] financial statements. The [illegible] set out below.

[illegible]

KPMG LLP	2021 £'000	2020 £'000
Fees payable to the company's auditor and its associates for the audit of parent company and consolidated financial statements	335	198
Fees payable to company's auditor and its associates for other services:		
The audit of company's subsidiaries	27	27
Audit related assurance services	20	20
Tax and other advisory services		189
Total KPMG LLP (group auditors)	**382**	**424**

Ernst and Young (auditors of MBE Technology Pte & CSDC)	2021 £'000	2020 £'000
Subsidiary company's audit	34	27
Tax services	9	9
Total Ernst and Young (auditors of MBE Technology Pte & CSDC)	43	36
Total	**425**	**470**

The Audit & Risk Committee also monitors the effectiveness of the annual audit. Before the end of the financial year, the Committee receives a detailed audit plan from the auditors that identifies the auditors' assessment of the key risks and their intended areas of focus. This is agreed with the Committee to ensure that the scope and coverage of audit work is appropriate. IQE's management also provide the Committee with feedback on the effectiveness of the audit and the quality of the audit firm and lead audit partner.

In addition, the Group's auditors are required to make a formal report to the Audit & Risk Committee annually on the safeguards that are in place to maintain their independence and the internal safeguards in place to ensure their objectivity.

A resolution to reappoint KPMG will be proposed at the forthcoming Annual General Meeting.

Internal Audit & Controls

The Audit & Risk Committee has reviewed the effectiveness of IQE's system of internal controls and risk management activities bi-annually as part of the half year and full year results reporting.

The system of internal control comprises those controls established in order to provide assurance that IQE's assets are safeguarded against unauthorised use or disposal, and to ensure the maintenance of proper accounting records and the reliability of financial information used within the business or for publication.

The key procedures that IQE has established with a view to providing effective internal control include the following:

- a clearly defined organisational structure and limits of authority
- corporate policies and procedures for financial reporting and control, project appraisal, human resources, quality control, health and safety, information security and corporate governance
- the preparation of annual budgets and regular forecasts which require approval from the Board
- the monitoring of performance against budget and forecasts and the reporting of any variances in a timely manner to the Board
- regular review and self assessment of IQE's risks, taking steps to monitor and mitigate these wherever possible
- where appropriate, taking out insurance cover
- review by the Audit & Risk Committee of audit plans and, on behalf of the Board, of reports on IQE's accounting and financial reporting practices and its internal controls together with reports from the external auditors as part of the normal audit work

This process remained in operation for the year under review and is part of that process: management reported any material exceptions to the Audit & Risk Committee.

IQE does not have an independent internal audit function however, it does operate internal audit on an ad hoc peer review basis, with a scope of evaluating and testing IQE's financial control procedures. The Committee considers that this remains appropriate for IQE's size and geographical spread, but the Committee keeps this under constant review.

In completing its review of the effectiveness of IQE's system of internal controls, the Audit & Risk Committee has taken account of any material developments up to the date of the signing of the most recent financial statements. In addition, recognition is given to the external audit findings, which help to inform the Audit & Risk Committee's views on areas of increased risk.

Risk Management

The Group Risk Committee was created in 2020 to identify, review, assess and track IQE's key risks and mitigating actions. The Group Risk Committee documents its approach through a risk register which is shared and discussed with the Audit & Risk Committee.

Key risk management activities performed by IQE are summarised on page 40. The Committee uses an active top-down risk management process that includes a regular review of IQE's risk register and deep dives into specific areas of risk.

IQE's principal risks and uncertainties are set out on pages 41 to 44. While many of the key risks identified recur from year to year, their relative importance evolves over time and may require IQE to refocus its assurance activities. In the year ahead, the Committee will continue to work with the Board, Executive Leadership Team and other senior management to ensure that there is appropriate focus on the most significant risk areas together with the associated plans for mitigating their impact.

Anti-bribery and corruption

IQE maintains a zero tolerance approach against corruption. It has an established anti-bribery and corruption policy, which includes guidance on the giving and receiving of gifts and hospitality. This policy applies throughout IQE's business. A Gifts and Hospitality Register is maintained to ensure transparency.

Whistleblowing

IQE operates a confidential reporting mechanism overseen by IQE's General Counsel & Company Secretary, which encourages employees to raise concerns of misconduct, non-compliance or unethical conduct. The channels for raising concerns are widely communicated to employees. These channels are clearly set out in IQE's Whistleblowing Policy. IQE's reporting policy and procedures provide a framework for protected disclosure.

Nominations Committee Report

Nominations Committee Chair's Introduction

Phil Smith became Chair of the Nomination Committee in January 2021 and has overseen a number of changes to IQE's Board during 2021.

The Committee successfully lead the search for a new Chief Executive Officer to succeed Dr Drew Nelson with Americo Lemos joining IQE on 10 January 2022. Given Drew was founder and CEO and such an influential figure in the semiconductor industry, it was vital that we found a replacement who could continue with that influence and credibility in the industry whilst bringing new attributes to take IQE to a new level. We believe we have that with Americo Lemos. The Committee agreed on the desired experiences and leadership credentials required for the new Chief Executive Officer and engaged an external search firm to assist with the search. The external search firm had no other connection with IQE and were an independent provider of services to the Group.

The Committee was also successful in its search for a new Non Executive Director in light of Sir David Grant's retirement from the Board shortly after the 2021 AGM. Candidates were sought with the technical and professional skills to take on Committee responsibilities, including in particular Chairmanship of the Remuneration Committee. We also sought candidates who would enhance strategic discussion in the boardroom. The search led to the appointment of Victoria Hull who joined IQE as a Non Executive Director and Chair of the Remuneration Committee on 1 August 2021. Victoria brings a breadth of experience and skills to the Board from a broad range of industries. Additionally she has some sector and growth experience and hence is a very positive addition to the Board.

Phil Smith
Committee Chair
29 March 2022

Role of the committee

The Nominations Committee is responsible for leading the process in the selection and appointment of directors and for ensuring plans are in place for an orderly succession of Board and senior management positions.

Key responsibilities

- review the structure, size and composition (including the skills, knowledge, experience and diversity) of the Board and make recommendations to the Board with regard to any changes
- identify, evaluate and recommend candidates for appointment as directors
- succession planning for directors and other senior management
- review developments in law, regulation and best practice relating to corporate governance and make recommendations to the Board on appropriate action

Membership

Phil Smith – Chair

Carol Chesney

Derek Jones

Victoria Hull

Meetings and attendance

The number of changes to IQE's Board of Directors through 2021 meant that the Nominations Committee met frequently and often on an ad hoc basis throughout 2021. All members attended each meeting.

Activities during 2021

The Committee was responsible for leading the search for a new Chief Executive Officer to succeed Dr Drew Nelson and for the appointment of a new Non-Executive Director in light of Sir David Grant's retirement from the Board. The Committee is pleased to have nominated Americo Lemos as the Group's new Chief Executive Officer and Victoria Hull as Non-Executive Director and Chair of the Remuneration Committee. The Committee continues to review the skills, experience and diversity on the Board.

Corporate Governance

Remuneration Committee Chair's Introduction

On behalf of the Board, I am pleased to present IQE's Directors' Remuneration Report for 2021. This is my first report as Chair of the Remuneration Committee since stepping into the role on 18 September 2021. I would like to take this opportunity to thank Sir David Grant for his valuable contribution to IQE and the Remuneration Committee prior to his retirement from the Board in September last year.

Reported financial performance in 2021 was significantly impacted by foreign exchange headwinds caused by the relative strength of Sterling versus the US Dollar, with the majority of IQE's revenues denominated in US Dollars. IQE also experienced a softening of demand in Q4 2021. As a result, the Group's full year revenues for 2021 were £154m with an operating loss of £20m, representing a 13% reduction in revenues year on year.

The Committee will always seek to ensure that the remuneration of IQE's Executive Directors reflects the underlying performance of the business. The Committee determined that no bonuses would be paid to the Executive Directors for performance in 2021 and that there would be no increases in salary. The LTIP awards granted to the previous Chief Executive Officer and the Chief Financial Officer in 2019 will lapse in their entirety at the end of March 2022 because the associated performance conditions were not met.

I hope that you find the Remuneration Report to be clear in explaining the implementation of our Remuneration Policy in 2021. I value greatly engagement with IQE's shareholders and other stakeholders and welcome your feedback on this Directors' Remuneration Report.

I hope you will be supportive of the resolution providing an advisory vote on the remuneration report for 2021. I look forward to our AGM in June 2022.

Victoria Hull
Non-Executive Director and Chair of the Remuneration Committee

23 March 2022

Remuneration at a glance

	Purpose and link to strategy	Key features	Planned for 2022	Implementation in 2021
Salary	Supports the attraction and retention of the best global talent with capability to deliver IQE's strategy	Reviewed annually Salaries take account of external market and internal employee context	Effective 1 January 2022: • CEO £575,000* • CFO £369,706 (no increase) Average salary increase for wider workforce of around 2% *Americo Lemos joined IQE as CEO on 1 January 2022	2% salary increases for the previous CEO and the CFO In line with approach for wider workforce
Allowance and benefits	Provision of market competitive and cost effective benefits to support attraction and retention of talent	Provision of competitive benefits based on local market practice Maximum company pension contribution is 10% of salary	Company pension contribution: • CEO 10% of salary • CFO 10% of salary The 10% pension contribution is consistent with that available to the wider workforce	Allowances and benefits unchanged from prior year. CEO and CFO pension contributions 10% of salary
Annual incentive	Incentivises delivery of IQE's financial and strategic targets Provides focus on key financial metrics and the individual's contribution to IQE's performance	Target opportunity is 50% of salary and maximum is 120% of salary Performance measures, weightings and stretching targets set annually Paid out in cash after end of the financial year, save that any payout above 100% of salary will be made in the form of a share grant Subject to malus and clawback provisions	For the year ending 31 December 2022, the maximum opportunity remains 120% of salary for both the CEO and the CFO. The performance measures are EBITDA (weighted 40%), revenue (15%), operating cash flow (15%), and personal and strategic objectives (30%)	The 2021 annual bonus payout to both the previous CEO and the CFO was nil
Long-term incentives	Rewards long-term performance in line with IQE's strategy Provides focus on delivering long-term returns to shareholders	Annual awards under IQE's LTIP • CEO 150% of salary • CFO 150% of salary Maximum annual awards of up to 200% of salary in exceptional circumstances, such as recruitment 3 year performance period Performance measures, weightings and stretching targets reviewed annually Subject to malus and clawback provisions	In line with the recruitment policy, Americo Lemos was granted an exceptional award under the LTIP on joining IQE equal to 200% of his salary. The CFO will receive an award of 150% of salary For the 3 year performance period ending 31 December 2021, the performance measures are EPS (weighted 40%), relative TSR (15%), absolute TSR (15%), revenue (10%) and strategic objectives (20%) 25% of the award will vest at threshold, increasing on a straight line basis to 100% for stretch. There is no vesting below the threshold level	The awards granted to the previous CEO and the CFO in 2019 lapsed as the applicable performance conditions were not met
[illegible]	Ensures alignment between the interests of Executive Directors and shareholders	Minimum shareholding requirements: • CEO 200% of salary • CFO 200% of salary New joiners given a 5 year reach threshold and not expected to self fund		CEO's shareholding 69% of salary CFO's shareholding [illegible]% of salary Tim Pullen joined IQE at the start of 2019

Directors' Remuneration Policy

IQE aims to attract, retain and motivate high calibre executives, whilst recognising the need to be cost effective, and to incentivise significant industry out performance. The Remuneration Committee established a remuneration policy that balances these factors, taking account of investor feedback and prevailing best practice. This section of the Directors' Remuneration Report sets out the Policy for Executive Director remuneration which was adopted at the start of 2020.

Function	Operation	Opportunity	Performance metrics
Base salary To recognise the individual's skills and experience and to provide a competitive total package	Base salaries are reviewed annually, with reference to market levels, individual contribution, the experience of each Executive and increases across the Group. Any adjustments become effective on 1 April	Any base salary increases are applied in line with the outcome of the Remuneration Committee's review In respect of existing Executive Directors it is anticipated that salary increases will generally be in line with those of salaried employees as a whole. In exceptional circumstances (including, but not limited to, a material increase in job size or complexity, material market misalignment) the Remuneration Committee has discretion to make appropriate adjustments to salary levels to ensure they remain appropriate	n/a
Pension To provide an opportunity for executives to build up income on retirement	All Executives are members of the Group pension scheme and/or receive a cash pension allowance. Salary is the only element of remuneration that is pensionable	Executive Directors receive a pension contribution of 10% of salary or an equivalent cash allowance. This aligns with the pension arrangements for IQE's employees where employee contributions are 'double matched' up to a limit of a 10% contribution from IQE	n/a
Benefits To provide non-cash benefits which are competitive in the market in which the executive is employed	Executives receive benefits which consist primarily of health cover, private medical insurance, life assurance, long term disability insurance and reimbursement for fuel, although may include other benefits that the Remuneration Committee deems appropriate in the circumstances	Benefits may vary according to role and individual circumstances. Eligibility to benefits and the cost of benefits are reviewed periodically The Remuneration Committee retains discretion to approve a higher cost in exceptional circumstances (e.g. relocation or expatriation) or in circumstances where market rates have changed (e.g. cost of insurance cover)	n/a
Annual Bonus To incentivise and reward strong performance against financial and personal annual targets, thus delivering value to shareholders and being consistent with the delivery of the strategic plan	Performance measures, targets and weightings are set at the start of the year The scheme is based on a combination of financial performance and personal objectives. At the end of the year the Remuneration Committee determines the extent to which the financial performance targets and personal objectives have been achieved Bonus payments up to 100% of salary are delivered in cash or in the form of stock grants Clawback (of any bonus paid) may be applied during employment or for 2 years post termination in the event of gross misconduct, material financial misstatement, error in calculation of outcomes or in any other circumstance that the Remuneration Committee considers appropriate	For Executive Directors the maximum annual bonus opportunity will be 120% of base salary The bonus pays 0% at Threshold, 50% at Target and 100% at stretch, with straight line vesting between these levels Any bonus earned over 100% of base salary would be paid in the form of share grants	Performance is assessed on an annual basis against financial and personal strategic objectives set at the start of each year Financial measures will be weighted appropriately each year according to business priorities, and will represent no less than 70% of the annual plan. Performance vs. targeted levels will be measured at budgeted FX rates Personal strategic objectives will represent no more than 30% of the maximum opportunity and will be set annually to capture expected individual contributions to IQE's strategic plan. The personal element will be restricted to 15% of the maximum opportunity in the event the thresholds for two out of the three relevant financial measures are not met The Remuneration Committee has discretion to adjust formulaic bonus outcomes to ensure fairness for shareholders and participants, to ensure pay aligns underlying company performance, and to avoid unintended outcomes. These adjustments can be either upwards (within plan limits) or downwards (including down to zero). The Remuneration Committee may consider measures outside of the bonus framework to ensure there is no reward for failure. Any adjustment would be carefully considered and fully explained in the Annual Report on Remuneration Further details of the measures, weightings and targets applicable are provided on page 66 in the Annual Report on Remuneration

Function	Operation	Opportunity	Performance metrics
LTIP To drive sustained long term performance that supports the creation of shareholder value.	Under the long term incentive plan (LTIP) annual awards of shares or nil cost options may be made to participants. Award levels and performance conditions are reviewed before each award cycle to ensure they remain appropriate. The Committee has the discretion to authorise a payment, in shares, equal to the value of dividends which would have accrued on vested shares during the vesting period. Malus (of any unvested LTIP) and clawback (of any vested LTIP) may be applied during employment or for 2 years post termination in the event of gross misconduct, material financial misstatement, error in calculation of outcomes or in any other circumstance that the Remuneration Committee considers appropriate.	The LTIP provides for normal awards of up to 150% of salary. In exceptional circumstances, including but not limited to recruitment, normal awards may be made up to 200% of salary to secure the right individual. Up to 25% of the LTIP will be paid for achieving Threshold performance, increasing on a straight line basis to full vesting for achieving Stretch performance.	Vesting of LTIP awards is subject to achieving performance conditions and continued employment. LTIP awards to Executive Directors have the same vesting period as those issued to IQE's other employees, being measured over three consecutive financial years. The Remuneration Committee has limited discretion to change the performance conditions and cannot make any performance condition materially easier to satisfy without shareholder approval. If no entitlement has been earned at the end of the relevant performance period, awards lapse. The Remuneration Committee has discretion to adjust outcomes to ensure they fairly reflect underlying performance. The Remuneration Committee also considers environmental, social, governance and health and safety criteria, to ensure there is no reward for failure.

Notes to the policy table

Performance measure selection and approach to target setting

The measures used under the annual bonus plan are selected annually to reflect IQE's main objectives for the year and reflect both financial performance and personal contributions to delivering the strategic plan. The performance conditions for new LTIP awards are selected to reflect IQE's long term objectives which support the creation of shareholder value.

In terms of the performance conditions for the LTIP, the Remuneration Committee considers Fully Diluted Adjusted Earnings Per Share ('EPS') to be a key measure of IQE's long term bottom line performance, while Total Shareholder Return ('TSR') is a measure which strongly aligns management and shareholder interests. The Remuneration Committee also considers that it is appropriate to include performance conditions which look at absolute revenue growth and the achievement of IQE's strategic objectives. Targets applying to the bonus and new LTIP awards are reviewed annually, based on a number of internal and external reference points. Performance targets are intended to be stretching and achievable and reflect IQE's strategic priorities and its market opportunities.

Remuneration policy for other employees

All employees are eligible to participate in a discretionary annual bonus and receive awards under the LTIP.

Shareholding guidelines

The Remuneration Committee wishes to encourage Executive Directors to build up a significant shareholding in the Company. Shareholding guidelines are therefore in place to require Executive Directors to acquire a shareholding (excluding shares held conditionally pursuant to LTIP performance) equivalent to 200% of base salary. 50% of any shares vesting (post tax) under the new LTIP are required to be held until the relevant shareholding level is achieved. Executive Directors are expected to build up the required shareholding within five years of appointment to the Board, although the Remuneration Committee will exercise its absolute discretion where Executive Directors have been impeded from building up their required shareholding due to business performance. Details of the Executive Directors' current shareholdings are provided in the Annual Report on Remuneration at page 55.

Non-Executive Director remuneration

Non-Executive Director	Date of appointment letter	Remuneration per annum
Phil Smith	30 November 2016	£125,000
Sir Derek Jones	1 December 2017	£50,000
Carol Chesney	13 May 2019	£50,000
Victoria Hu	16 July 2021	£50,000
Andrew Nelson	30 October 2021	£75,000
Sir David Grant	1 September 2012	£50,000

[illegible]

[illegible]

Subject to re-election by shareholders, Non-Executive Directors are appointed by the full Board and retire annually in accordance with the Company's Articles of Association. The remuneration of Non-Executive Directors is determined by the full Board, subject to an individual limit of £150,000 per annum (or such other figure as shareholders may from time to time authorise) in accordance with the Company's Articles of Association.

The Non-Executive Directors are not eligible to participate in IQE's performance related bonus plan, long term incentive plans or pension arrangements. Copies of the Non-Executive Directors' appointment letters are available for inspection at the Company's registered office during normal business hours.

Executive Director remuneration

* LTIP value calculated based on market value of the options at the date of grant less the nominal grant price

The 'Minimum' scenario comprises fixed remuneration, i.e. base salary, pension and benefits, which are the elements of the remuneration package not linked to performance. The figures for base salary and pension (10% of salary) are as of 1 January 2022, while those for taxable benefits are based on the latest single figure table for 2021. The 'On Target' scenario reflects fixed remuneration as above, plus a target bonus payout of 50% of maximum and threshold vesting for the LTIP of 25% of maximum. The 'Stretch' scenario reflects fixed remuneration, plus full payout of the annual bonus (120% of salary) plus full vesting of the normal LTIP of 150% of salary (200% of salary for Americo Lemos for 2022 only). The 'Stretch + 50%' reflects the 'Stretch' scenario plus an assumed 50% share price appreciation over the LTIP performance period.

Approach to recruitment remuneration

External appointments

In the cases of hiring or appointing a new Executive Director from outside the Company, the Remuneration Committee may make use of all the existing components of remuneration, as follows:

Component	Approach	Maximum annual grant value
Base salary	The base salaries of new appointees will be determined by reference to relevant market data, experience and skills of the individual, internal relativities and current basic salary. Where new appointees have initial basic salaries set below market, any shortfall may be managed with phased increases over multiple years subject to the individual's development in the role	
Pension	New appointees will receive pension contributions or an equivalent cash supplement in line with existing policy	
Benefits	New appointees will be eligible to receive benefits which may include (but are not limited to) those outlined in the policy table	
Annual Bonus	The structure described in the policy table will apply to new appointees with the relevant maximum being pro-rated to reflect the proportion of employment over the year. Targets for the personal element will be tailored to each executive	In line with the normal annual limit
LTIP	New appointees will be granted awards under the LTIP on the same terms as other executives, as described in the policy table	Up to 200% of salary on appointment, then in line with the normal annual limit thereafter

In determining the appropriate remuneration for a new executive director, the Remuneration Committee will take into consideration all relevant factors, including the nature and quantum of each component of remuneration and the jurisdiction from which the candidate was recruited, to ensure that arrangements are in the best interests of IQE and its shareholders. The Remuneration Committee may also make an award in respect of a new appointment to 'buy out' remuneration arrangements forfeited on leaving a previous employer, which may be awarded in addition to the ongoing remuneration elements outlined in the table above. In doing so, the Remuneration Committee will consider relevant factors, including time to vesting, performance conditions attached to awards, and the likelihood of those conditions being met. Any buy-out awards would typically be made under the existing annual bonus and LTIP schemes, although in exceptional circumstances the Remuneration Committee may exercise the discretion available under Listing Rule 9.4.2 R to make awards using a different structure. Any buy-out awards would have a fair value no higher than the awards forfeited. The Remuneration Committee will seek advice from independent remuneration consultants on the structure and award package for a new Executive Director.

Internal appointments

In the case of an internal promotion to the Board, the Remuneration Committee will use the same policy as detailed above, although there will be no opportunity for a buyout. However, where an individual has contractual commitments made prior to their promotion to Executive Director level, the Company will continue to honour these arrangements.

Non Executive Directors

In recruiting a new Non Executive Director, the Remuneration Committee will utilise the policy as set out on pages 62 & 63.

Service contracts and treatment for leavers and change of control

Executive	Date of service contract
Mr Americo Lemos	10 January 2022
Mr Tim Pullen	4 February 2019

Executive Director service contracts, including arrangements for early termination, are carefully considered by the Remuneration Committee. Each of the Executive Directors has a rolling service contract requiring 6 months' notice of termination on either side. Such contracts contain no specific provision for compensation for loss of office, other than an obligation to pay for any notice period waived by the Company, where pay refers to salary, benefits and pension only. Executive Directors' service contracts are available to view at the Company's registered office.

When considering exit payments, the Remuneration Committee reviews all potential incentive outcomes to ensure they are fair to both shareholders and participants. The table below summarises how the awards under the annual bonus and LTIP are typically treated in different circumstances, with the final treatment remaining subject to the Remuneration Committee's discretion.

Reason for leaving	Calculation of vesting / payment
Annual bonus	
Resignation	No annual bonus payable
'Good leaver'[1]	Cash bonuses will typically be paid to the extent that performance objectives have been met. Any resulting bonus will typically be pro-rated for time worked. The Remuneration Committee retains discretion to vary this treatment in individual circumstances
Change of control	
Resignation	Outstanding awards lapse
LTIP	
'Good leaver' and change of control	The Committee determines whether and to what extent outstanding awards vest based on the extent to which performance conditions have been achieved and the proportion of the vesting period worked. The Remuneration Committee retains discretion to vary this treatment in individual circumstances. The determination of vesting will be made as soon as reasonably practical following the end of the performance period or such earlier date as the Remuneration Committee may agree (within 12 months in the event of death). In the event of a change of control, awards may alternatively be exchanged for new equivalent awards in the acquirer where appropriate

[1] A good leaver [illegible] Committee determines [illegible]

External appointments

With the approval of the Board in each case and subject to the overriding requirements of the Group, Executive Directors may accept external appointments as Non Executive Directors of other companies and retain any fees received. None of the Executive Directors received any remuneration from external directorships during the year.

Consideration of conditions elsewhere in the company

When making decisions on changes to Executive Director remuneration, the Remuneration Committee considers changes to pay and conditions across the Group. To this end, the Remuneration Committee receives a summary of the proposed level of average increase for employees prior to the annual salary review. For Executive Directors, the Remuneration Committee does not formally consult with employees on the executive remuneration policy and its implementation.

Consideration of shareholder views

The Remuneration Committee maintains a regular dialogue with the Company's major shareholders. Following the 2019 AGM, IQE Management consulted with shareholders regarding the concerns raised regarding the introduction of the new all employee LTIP plan. IQE has made the necessary changes to the administration of the LTIP to align leaver provisions for all employees to those set out for the Executive Directors' "Good Leavers" which involve a pro-rated reduction to vesting based on performance and the portion of the vesting period expired up to the time of the termination of employment. The Committee maintains a view of the commitments to issue shares under the LTIP as a percentage of the issued share capital in any rolling 10 year period, acknowledging the Investment Association guidelines recommending a 10% limit and the response from the Institutional Shareholder Service in connection with the adoption of the LTIP in 2019. The LTIP currently allows for a maximum dilutive effect of 15%. The dilutive effect of commitments issued under the LTIP is declining year on year and the Committee is confident that it will fall below the recommended 10% limit in the next few years.

Annual Report on Remuneration

Role of the Committee

The Remuneration Committee has responsibility for determining the policy for Executive Director remuneration and setting remuneration for the Company Chair and Executive Directors.

Key responsibilities

- recommending the remuneration policy for Executive Directors, whilst considering the remuneration for the Executive Leadership Team and remuneration policies for employees below the Board;
- approving the principles of IQE's LTIP and the parameters, including performance conditions, for the annual awards under the LTIP;
- maintaining appropriate dialogue with shareholders on remuneration matters;
- preparing the annual remuneration report to shareholders to show how the remuneration policy has been implemented.

Membership

Victoria Hyde (Chair)

Phil Smith

Derek Jones

Carol Chesney

Meetings and attendance

The Remuneration Committee met twice in 2021. All members attended each meeting. The Chief Executive Officer and Chief Financial Officer attended meetings to present proposed performance ratings for the Executive Directors and Executive Management Board and remuneration policies and ideas for the workforce. The Chief Executive Officer and Chief Financial Officer did not attend those parts of the Committee meetings relating to the Committee's decisions on their own performance and remuneration.

Remuneration Committee role, membership and advice

The primary role of the Remuneration Committee is to determine and agree with the Board fair and reasonable remuneration arrangements for the Chairman and Executive Directors.

The main activities of the Remuneration Committee during the year were as follows:

- evaluated the performance of the Chief Executive Officer and Chief Financial Officer;
- determined annual bonuses payable to Executive Directors and the Executive Leadership Team in 2021;
- determined basic salary increases for IQE's employees, including the Executive Directors and the Executive Leadership Team;
- evaluated the proposed awards under the Company's LTIP;
- reviewed and approved performance conditions for LTIP awards;
- reviewed and approved the Executive Directors' salaries for 2022;
- determined performance targets for the Executive Directors' 2022 annual bonus and LTIP awards in line with IQE's strategic plan;
- evaluated revisions to IQE's LTIP and [illegible] schemes for employees;
- considered proposed workforce policies on performance rating and proposed policy for workforce pay increases;
- drafted the Directors' Remuneration Report;
- considered benchmarking and advice from independent remuneration consultants, Mercer | Kepler.

The Remuneration Committee's Terms of Reference are set out on the Company's website at www.iqep.com.

During the year, the Remuneration Committee comprised all of the Non-Executive Directors. The number of meetings held during 2021 by the Remuneration Committee and attendance by the individual Committee members at such meetings is set out in the Board Report on page 57.

Mercer | Kepler provides independent advice to the Remuneration Committee. Mercer | Kepler is a signatory to the Code of Conduct for Remuneration Consultants [illegible] by the Remuneration Consultants Group [illegible] objective and independent [illegible] Mercer | Kepler [illegible] executives [illegible] Remuneration Report [illegible] Fees of £19,500 [illegible] Mercer | Kepler [illegible] 2021. The Committee considers that Mercer | Kepler is independent [illegible] IQE [illegible] advice on remuneration.

Board changes

There were a number of Board changes during 2021 and at the beginning of 2022.

Dr Andrew Nelson completed his transition from CEO on 30 October 2021, and became a non independent Non Executive Director and President on the same date. He received salary, benefits and pension for his executive role in respect of the period 1 January to 30 October 2021, as set out in the single figure table below. He will continue to receive pay in lieu of notice, in line with the terms of his employment contract, until April 2022, totalling £274,600.86. He did not receive a bonus for 2021 and no LTIP award vested to him as the applicable performance targets were not met. His outstanding LTIP awards will continue in effect, albeit with a pro rata reduction to reflect time served in his executive role and the extent of any vesting will be determined at the end of the relevant performance period. Dr Andrew Nelson receives an annual fee of £75,000 in his new role as a Non Executive Director and President.

Anderco Lemos was appointed as CEO on 10 January 2022. His salary is £575,000, and he receives benefits and pension in line with the remuneration policy. He is eligible for an annual bonus of up to 120% of salary subject to the normal performance targets and he received an exceptional award under the LTIP of 200% of salary in 2022, again subject to the normal performance targets. It is anticipated that from 2023, Anderco's LTIP award will be 150% of salary. Over the first 12 months of his employment, Anderco will also receive a buyout award in respect of remuneration forgone at his previous employer with a value equal to £1,000,000, comprising a cash bonus totalling £800,000 and an award of 583,709 shares, worth £200,000. The buyout award is not subject to any performance conditions though malus and clawback provisions apply.

Phil Smith, the Non Executive Chair, took on an executive role for the period 7 September 2021 to 9 January 2022 to support the transition from the previous CEO to the new CEO. For this period only, Phil received a total fee on a per diem rate of £2,750.

Sir David Grant retired from the Board on 18 September 2021. Victoria Hull was appointed as an Non Executive Director on 16 July 2021, and receives an annual fee of £50,000.

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

The table below sets out a single figure for the total remuneration received by each Executive Director for the year ended 31 December 2021 and the prior year.

	Dr. Andrew Nelson[1]		Mr Tim Pullen		Mr Phil Smith[2]	
	2021	2020	2021	2020	2021	2020
	£'000	£'000	£'000	£'000	£'000	£'000
Salary	450	538	368	363	97	
Benefits	7	7	11	11		
Starting Bonus			25	131		
Pension	50	54	37	36		
Total fixed	**507**	**599**	**441**	**541**	**97**	
Annual bonus		511		344		
Long term incentive						
Total variable		511		344		
Total Executive Remuneration	**507**	**1,110**	**441**	**885**	**97**	
Non executive fees	13				125	125
Total Director Remuneration	**520**	**1,110**	**441**	**885**	**222**	**125**

[1] Dr Andrew Nelson is entitled to payment in lieu of notice totalling £275,000 [illegible] Chief Executive Officer on 31 October 2021.

[2] Mr Phil Smith's executive remuneration relates to the period [illegible] Executive Chairman [illegible] as Non Executive Chairman prior to 7 September 2021.

Benefits [illegible]

Annual bonus [illegible]

No LTIPs vested.

Executive Directors are entitled to participate in a defined contribution [illegible] the Company contributes 10% of salary or an equivalent cash allowance.

Incentive outcomes for year ending 31 December 2021

Annual Bonus

The annual bonus for 2021 was determined by a combination of cash, revenue and profit targets and additional strategic targets. The Committee set stretching performance targets for 2021 which were linked to the strategy and financial performance of the Group. Financial performance for 2021 was below expectations which meant that there was no annual bonus for the Chief Executive Officer or the Chief Financial Officer.

The Committee is satisfied the policy has operated as intended and has concluded that there are no circumstances in which it would need to exercise discretion to adjust any of the variable pay outcomes.

Long-term incentive plan

966,215 LTIP options awarded to Andrew Nelson and 699,613 LTIP options awarded to Tim Pullen, both in 2019, have not satisfied the applicable performance criteria and have lapsed.

Percentage change in CEO remuneration

The table below shows the percentage change in CEO remuneration from the prior year compared to the average percentage change in remuneration for other employees. The CEO's annual remuneration includes base salary, taxable benefits and annual bonus. The % change in annual remuneration for other employees is calculated using the increase in the earnings of all employees who were employed in the UK throughout 2020 and 2021. The Committee considers the UK employee population to be the most appropriate comparison for CEO vs other employee pay, as all executive directors are currently employed in the UK, our UK employee population includes employees at all levels of the organisation, and pay inflation in our other geographies is affected by different local market factors.

	Dr. Andrew Nelson[1]			All UK Employees		
	2021 £'000	2020 £'000	Increase %	2021 £'000	2020 £'000	Increase %
Salary	463	538	16.2%	5,833	5,438	7.3%
Pension	50	54	7.9%			n/a
Benefits	7	7	0.0%	53	39	36.1%
Annual bonus		511	n/a			n/a
Total	**520**	**1,110**		**5,886**	**5,477**	

[1] [illegible]

Relative importance of spend on pay

The graph below shows shareholder distributions (i.e. dividends and share buybacks), total employee pay expenditure and investment in capital expenditure, research & development and intangibles for the financial years ended 31 December 2020 and 31 December 2021, along with the year on year percentage change.

Review of past performance

The following graph charts the Total Shareholder Return (TSR) of the Company and the FTSE AIM Index (to which IQE is a member) over the period from 1 January 2015 to 31 December 2021. The table below details the Chief Executive's single figure of remuneration over the same period.

Historical TSR performance

Historical CEO remuneration

	2017	2018	2019	2020	2021[1]
CEO single figure of remuneration (£'000)	1,087	3,683	599	1,110	507
STI award as a % of maximum opportunity	100%	20%	0%	73%	0%
LTIP vesting as a % of maximum opportunity	n/a	52%	0%	0%	0%

[1] [illegible]

Scheme interests awarded in 2021 (audited information)

Executive director	Award type	Date of award	# shares awarded	Face value	End of performance period
Dr Andrew Nelson	Nil cost option	1 January 2021	1,118,938	£807,619	31 December 2023
Mr Tim Pullen	Nil cost option	1 January 2021	753,236	£543,686	31 December 2023

The face value of the shares awarded was based on the share price as at the date of award, being 73.18 pence at 1 January 2021, less the 1p nominal value exercise price.

Vesting of 60% of the awards are subject to absolute diluted EPS targets as illustrated on the chart below where EPS is measured at 31 December 2023.

Vesting of 40% of the awards are subject to absolute TSR targets as illustrated on the chart below where TSR is measured over the three years 31 December 2023.

Exit payments made in the year (audited information)

Dr Andrew Nelson is entitled to payments in lieu of notice totalling £275,000 that are payable in six equal monthly instalments over a period commencing from the date of his retirement as Chief Executive Officer on 31 October 2021.

Payments to past Directors

Payments made to past directors totalled £82,500 (2020: £75,000) and reflect ongoing services received from Dr Howard [illegible] following his retirement from the Board in 2019.

Single total figure of remuneration for Non-Executive Directors (audited information)

The table below sets out a single figure for the total remuneration received by each Non-Executive Director for the year ended 31 December 2021 and the prior year.

	NED fees		Other		Total	
	2021	2020	2021	2020	2021	2020
	£'000	£'000	£'000	£'000	£'000	£'000
Phil Smith	125	125	97	Nil	222	125
Mrs Carol Chesney	50	50	Nil	Nil	50	50
Sir Dennis Jones	50	50	Nil	Nil	50	50
Andrew Nelson	13	n/a	n/a	n/a	13	
Victoria Hull	21	n/a	Nil	Nil	21	
Sir David Grant	41	50	Nil	Nil	41	50

[illegible]

[illegible]

[illegible]

[illegible]

Implementation of remuneration policy for 2022

Base salary

The Remuneration Committee determined that no increase in salaries would be awarded for 2022.

Executive Director	Annual base salary at 1 January 2021	Annual base salary at 1 January 2022	Percentage increase
Americo Lemos		N/A	
Tim Pullen	£369,706	£369,706	NIL

Americo Lemos was appointed as the Group CEO on 10 January 2022 on a salary of £575,000.

Pension

Executive Directors are entitled to a pension contribution of 10% of salary or equivalent cash allowance. The typical employee pension contribution is up to 10% of salary.

Annual bonus

For 2022, the Executive Directors will have the opportunity to receive a cash bonus to be paid after the announcement of full year results for 2022, based on a mix of financial measures for the 2022 financial year and agreed personal and strategic objectives. EBITDA (weighted 40% of the maximum opportunity), revenue (15%), operating cash flow (15%), and personal and strategic objectives (30%).

Each measure has a threshold, on target, and stretch target approved by the Board of Directors in at the time of Budget approval. Threshold and on target performance will result in a bonus payment of 0% and 50% of the maximum opportunity respectively. The maximum bonus payout will be 120% of base salary if all stretch targets are met. Any payout above 100% of salary will be made in the form of a share grant, calculated based on the average of the share price on the three days preceding the date of the Annual Results Announcement.

There will be no bonus for the financial element of the bonus if threshold EBITDA is not satisfied. In the event of zero payout for financial performance, the maximum payout for personal and strategic measures will be restricted to 50% of the maximum bonus amount for that element.

LTIP

For 2022, the CEO received an award of 200% of salary on appointment (as part of his buyout), and the CFO will receive an award of 150% of salary in line with the policy. 40% of the award will vest on EPS performance, 15% on relative TSR performance vs. the FTSE All Share Index, 15% on absolute TSR performance, 10% on revenue growth, and 20% on strategic objectives. The performance targets for the financial and TSR measures are set out below.

Performance measure	Weighting (% of award)	Threshold (25% vesting)	Stretch (100% vesting)
EPS (IQE plc's Fully Diluted Adjusted Earnings per Share achieved for the year ended 31 December 2024)	40%	0.60	1.00
Relative TSR vs. FTSE All Share Index	15%	TSR equal to index	TSR equal to index+30% over the period
Absolute TSR	15%	6% p.a.	16% p.a.
Revenue growth	10%	10% p.a.	20% p.a.
Strategic scorecard	20%	Targets are deemed commercially sensitive and will be disclosed at vesting	

[illegible]

Directors' interests

A table setting out the beneficial interests of the Directors and their families in the share capital of the Company as at 31 December 2021 is set out below.

Since 1 January 2021 there have been the following changes in Directors' interests in shares.

2021	Shares owned as at 1 Jan 2021	Shares owned as at 1 Jan 2022	Shareholding requirement % salary/fee	Current shareholding % salary/fee
Americo Lemos			200%	31%
Tim Pullen			200%	0%
Phil Smith		40,000	N/A	N/A
Carol Chesney		10,000	N/A	N/A
Dr Andrew Nelson	36,190,417	36,190,417	N/A	N/A
Derek Jones			N/A	N/A
Victoria Hull			N/A	N/A
Sir David Grant	215,000	215,000	N/A	N/A

Americo Lemos was appointed as the Group CEO on 10 January [illegible]

Executive Directors are expected to build up a shareholding of 200% of salary within [illegible] years of appointment to the Board.

As first announced on [illegible] August 2015, Andrew Nelson [illegible] entered into a sale and repurchase agreement with Equinox [illegible] Ordinary Shares [illegible] subject to the Agreement. Andrew Nelson [illegible] including persons closely associated with him maintained a beneficial interest in 36,190,417 Ordinary Shares, representing approximately [illegible] of the Company's issued share capital.

Share Options (audited information)

2021	Unvested and subject to continued performance	Unvested and subject to continued employment	Vested but unexercised	Vested during year	Lapsed during year	Exercised during year
Dr Andrew Nelson	2,899,170				966,216	N
Tim Pullen	1,830,483				699,811	N

2020	Unvested and subject to continued performance	Unvested and subject to continued employment	Vested but unexercised	Vested during year	Lapsed during year	Exercised during year
Dr Andrew Nelson	2,716,778				162,816	
Tim Pullen	1,797,061					

Summary of shareholder voting at the 2021 AGM

Results of the vote on the remuneration report at the IQE's AGM on 23 June 2021 are as below:

	Total number of votes	% of votes cast
For (including discretionary)	163,251,895	98.57
Against	6,691,707	1.42
Total votes cast (excluding withheld votes)	169,916,602	99.9
Votes withheld	86,374	0.01
Total votes cast (including withheld votes)	170,032,976	100

ESG Committee Report

ESG Committee Chair's Introduction

The Environmental, Social and Governance ('ESG') Committee was established on 24 January 2022. Phil Smith is Chair of the Committee.

The ESG Committee will be responsible for developing and monitoring the execution of IQE's ESG strategy and the communication of IQE's ESG activities with our stakeholders. The ESG Committee will also be responsible for monitoring the Board's engagement with IQE's people, with Derek Jones acting as the Board's workforce representative and reporting to the ESG Committee.

The ESG Committee will be focussed on driving momentum and providing guidance in the development of IQE's ESG strategy. The Committee will ensure that the strategy aligns with IQE's short and long-term business goals and that the strategy is effective and implemented accordingly.

Given its recent establishment, the ESG Committee will be bringing further updates to our stakeholders through 2022 and we look forward to receiving your feedback on those.

Phil Smith
Committee Chair

23 March 2022

Role of the committee

The ESG Committee is responsible for developing and monitoring the execution of IQE's ESG strategy and the communication of that strategy to IQE's stakeholders.

Key responsibilities

- ensure that IQE has a fit for purpose ESG strategy and for driving momentum behind the development and implementation of that strategy
- be responsible for communicating IQE's position on Environmental, Social and Governance issues
- ensure that the strategy meets IQE's short and long term business objectives
- review the effectiveness of the strategy and the governance for its successful delivery
- approve ESG reporting and specifically any reporting and data included in IQE's Annual Report
- report to the Board about the Committee's work and progress against the strategy

Membership

Phil Smith (Chair)

Drew Nelson

Derek Jones (responsible for workforce engagement)

Meetings and attendance

The ESG Committee will meet at least twice a year.

Corporate Governance

Directors' Report

The Directors present their Annual Report and the Financial Statements for IQE plc (the "Company") for the year ended 31 December 2021.

Principal Activities and Future Development

The Company is the ultimate holding company of a group of subsidiary undertakings (the "Group") engaged in the research, design, development, manufacture and sale of compound semiconductor materials. An overview of our principal activities and an indication of likely future developments in the Group is given in the Strategic Report.

Strategic Report

The Strategic Report is set out on pages 2 to 47 of the Annual Report.

Directors & Directors' Interests

Biographies of all of the Company's directors at the date of this Annual Report, including Non Executive Directors, appear on pages 42 & 43 of the Annual Report. Victoria Hull was appointed to the Board as Non Executive Director on 1 August 2021 and Sir David Grant retired from the Board on 18 September 2021. Victoria has replaced Sir David as Chair of the Remuneration Committee. Andrew Nelson completed his transition from Chief Executive Officer to President and Non Executive Director on 30 October 2021. Americo Lemos was appointed as the Group's new Chief Executive Officer and a director on 10 January 2022.

The beneficial interests of the directors in the Company's share capital is shown on page 66 of the Remuneration Report. The beneficial interests of Andrew Nelson, President and Non Executive Director, and Tim Pullen, CFO, have changed during the year as they participate in the Company's LTIP.

No director was beneficially interested in the shares of any subsidiary company at any time during the year.

In the year to 31 December 2021, no director had a material interest in any contract of significance with the Company or any of its subsidiaries.

Insurance and Indemnities

The Group maintains insurance to cover its directors and officers against their costs in defending themselves in legal proceedings taken against them in that capacity and in respect of damages resulting from the unsuccessful defence of any proceedings. In addition, to the extent permitted by UK law, the Group indemnifies its directors and officers for liabilities arising from such proceedings. Neither the insurance nor the indemnity provides cover for situations where the director has acted fraudulently or dishonestly.

Risk Management and Principal Risks

A description of risk management and the principal risks facing the business are set out on pages [illegible] to [illegible] of the Annual Report.

Relationship with Suppliers and Customers

Our relationships with our customers are described throughout the Annual Report, particularly on page 38. Our relationships with our suppliers is specifically covered on page 30 of the Annual Report.

The Group seeks to agree payment terms with its suppliers where possible. Payment is made in accordance with the agreed terms.

Auditor and Disclosure of Information to the Auditor

The Company's auditor throughout the period of this Annual Report was KPMG LLP, who were appointed in December 2017.

As at the date of the approval of this Annual Report, as far as each director is aware, there is no relevant audit information of which the Company's auditor is unaware. Each director has taken all such steps as 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 Company's auditor is aware of that information.

Share Capital

The Company's share capital is made up of one class of ordinary shares of 1p each which each carry one vote at general meetings of the Company. Except as set out in the Articles of Association or in applicable legislation, there are no restrictions on the transfer of shares in the Company and there are no restrictions on the voting rights in the Company's shares. The full rights and obligations attaching to the Company's ordinary shares, as well as the powers of the directors, are set out in the Company's Articles of Association, a copy of which is available on the Company's website. These can also be obtained from Companies House or by writing to the General Counsel and Company Secretary.

The Company is not aware of any agreements entered into between any shareholders in the Company which restrict the transfer of shares or the exercise of any voting rights attached to the shares.

The Company has not acquired any of its own shares during 2021 (2020: nil).

Substantial Shareholdings

As at 28 February 2022, the following are beneficial interests of 3% or more (where the holding is direct) or of 5% or more (where the holding is indirect) which have been notified to the directors of the Company.

Shareholder	Shares	Issued Capital %
Invesco	112,435,802	17.71
T Rowe Price Global Investments	78,503,237	9.76
Canaccord Genuity Wealth Management	64,551,911	8.03
Hargreaves Lansdown	60,671,260	7.54
Interactive Investor	43,223,014	5.37
Dr Andrew W Nelson	40,317,231	5.01
Lombard Odier Investment Managers	36,287,627	4.51
M&G Investments	27,742,519	3.45

Source: Equiniti Investor Analytics

Dividends

The directors do not recommend the payment of a dividend (2020: £nil).

Research and Development

The Group continues to devote significant resources to the research and development and the updating and expansion of its range of products in order to remain at the forefront of its world markets. Further information on the expenditure on research and development is contained in Note 6 of the Financial Statements. The amount of research and development expenditure capitalised and the amount amortised, in the year, are given in Note 6 of the Financial Statements.

Employment Policies

A review of the Group's employment policies is provided on pages 24 to 27 of the Annual Report.

Political Donations

The Group has a policy of not making political donations and no political donations were made during the year (2020: nil).

Climate Change, Greenhouse Gas and Energy Emissions

The Group recognises Climate Change is a key challenge for the world and is working to minimise its environmental impact through a rigorous environmental management system, in order to minimise greenhouse gas (GHG) and energy emissions. We recognise that as a technology leader, IQE is in a unique position to be able to improve energy efficiency through our products.

Our approach to environmental protection is underpinned by our Environmental Policy and Environmental Management System, which ensures all our sites operate in compliance with ISO 14001 requirements. We target minimisation of GHG and energy emissions, as well as focusing on waste, water and recycling initiatives. Details of our GHG and energy emission figures, as well as the measures we are undertaking to promote energy efficiency, including incorporating energy saving features into facility design, can be found on page 35.

In January 2022 the Group formed an Environment, Social and Governance Committee in recognition of the importance of ESG to IQE's stakeholders and the wider environment. The Committee will be chaired by me and will be responsible for ensuring that the Group has a fit for purpose ESG strategy and for supporting management with building momentum behind that strategy. We look forward to bringing further updates on ESG matters through 2022.

Phil Smith
Chairman, IQE plc

29 March 2022

Statement of Directors' responsibilities in respect of the Annual Report and the Financial Statement

Statement of Directors' responsibilities in respect of the financial statements

The directors are responsible for preparing the Annual Report and the Group and parent Company financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare Group and parent Company financial statements for each financial year. Under the AIM Rules of the London Stock Exchange they are required to prepare the Group's financial statements in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and applicable law and they have elected to prepare the parent Company financial statements on the same basis.

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

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant and reliable;
- state whether they have been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006;
- assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

The directors have decided to prepare voluntarily a Directors' Remuneration Report in accordance with Schedule 8 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 made under the Companies Act 2006, as if those requirements applied to the company. The directors have also decided to prepare voluntarily a Corporate Governance Statement as if the company were required to comply with the Listing Rules and the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority in relation to those matters.

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

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

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

We 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 position and performance, business model and strategy.

Approved by the Board and signed on its behalf by

Phil Smith
Chairman, IQE plc

29 March 2022

KPMG

Independent auditor's report

to the members of IQE plc

1. Our opinion is unmodified

We have audited the financial statements of IQE PLC ("the Company") for the year ended 31 December 2021 which comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated statement of changes in equity, consolidated cash flow statement, parent company balance sheet, parent company statement of changes in equity, parent company cash flow statement, and the related notes, including the accounting policies in note 2.

In our opinion:

— the financial statements give a true and fair view of the state of the Group's and of the parent Company's affairs as at 31 December 2021 and of the Group's loss for the year then ended;

— the Group financial statements have been properly prepared in accordance with UK-adopted international accounting standards;

— the parent Company financial statements have been properly prepared in accordance with UK-adopted international accounting standards and 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.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the Group in accordance with, UK ethical requirements including FRC Ethical Standard as applied to listed entities. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

Overview	
Materiality: group financial statements as a whole	£1,200k (2020:£1,250k) 0.8% of total revenues (2020: 0.7% of total revenues)
Coverage	88% (2020: 91%) of total group revenues

Key audit matters		**vs 2020**
Recurring risks	Carrying value of goodwill	▲
	Carrying value of development intangibles not yet available for use	◄►
	Revenue recognition	◄►
Parent Company only	Valuation of investments in and recoverability of receivables from subsidiaries	◄►
Event driven risk	Going concern	◄►

Financial Statements

2. Key audit matters: including our assessment of risks of material misstatement

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

	The risk	Our response
Carrying value of goodwill (£64.3 million, 2020: £63.7 million) Refer to note 2.8 (accounting policy), 3.1 (accounting estimate) and note 13 (financial disclosures).	**Forecast based assessment** We consider the carrying value of goodwill and the risk over potential impairment to be a significant audit risk because of the opportunity for manipulation and the inherent uncertainty involved in forecasting and discounting future cash flows, which are the basis of the assessment of recoverability. In 2021, the risk of impairment is heightened due to the potential impact of current market conditions on the timing and level of cash flows, in particular the adoption of 5G technology, the global demand for smartphones and the trade tensions between the US and China. The cash flow forecasts and the growth therein, and the discount rate, are key judgments and assumptions used in the Director's impairment review. The effect of these matters is that, as part of our risk assessment, we determined that the value in use of goodwill has a high degree of estimation uncertainty, with an opportunity for manipulation with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole, and possibly many times that amount. *In 2020, our key audit matter related specifically to the goodwill allocated to the Wireless CGU. In 2021, we consider there is an increased risk associated with the cash flow forecasts related to the Photonics CGU. As a consequence, the key audit matter relates to the total goodwill balance (which is allocated to both the Wireless and Photonics CGUs).*	Our procedures included: — **Benchmarking assumptions:** We challenged the director's assumptions and obtained support, such as board-approved plans, independent market reports and customer communications, where available, for the cash flow forecasts and growth assumptions. — **Our valuation expertise:** We independently derived a reasonable range of appropriate discount rates with the assistance of our valuation specialists and compared these to those calculated by the Group. — **Sensitivity analysis:** We performed both breakeven and reasonably foreseeable scenario sensitivity analysis on the discount rate and growth assumptions. — **Historical comparison.** We evaluated the track record of historical forecasts used against actual results achieved. — **Assessing transparency:** We assessed whether the Group's disclosures reflect the risks and uncertainties inherent in the valuation of goodwill. We performed the tests above rather than seeking to rely on any of the group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed *procedures described.*
Carrying value of development intangibles not yet available for use (£3.0 million, 2020: £8.2 million) *Refer to note 2.8 (accounting policy) and note 3 (a) (financial disclosures)*	**Subjective assessment** The ability of an intangible asset to generate sufficient future economic benefits to support its carrying amount is subject to considerable uncertainty during the development phase and is open to management bias. The current wider economic conditions are considered to give rise to an increased uncertainty around the ability and commitment to complete ongoing projects and availability of routes to market for new, unproven, technologies. The effect of these matters is that, as part of our risk assessment, we determined that there is an increased risk in respect of continued commercial viability, and consequently, intention to complete the development, of previously capitalised development intangibles not yet available for use.	Our procedures included: — **Challenging assumptions:** We challenged the Group's assessment of the future viability of development intangibles not yet available for use, assessing value in use calculations supporting their commercial viability with reference to external evidence, including customer correspondence for specific projects and/or external market analyst reports in respect of the associated technologies. — **Personnel interviews:** We held discussions with the Group's Chief Technology Officer to corroborate our understanding of the future uses, opportunities and intention for the development intangibles. — **Assessing transparency:** We have assessed whether the group's disclosures reflect the risks inherent in the valuation of development intangibles not yet available for use. We performed the tests above rather than seeking to rely on any of the group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described.

KPMG

2. Key audit matters: our assessment of risks of material misstatement (continued)

	The risk	Our response
Revenue recognition (Period end timing matters affecting revenue - total revenue in the period is £154.1 million, 2020: £178.0 million) *Refer to note 2.22 (accounting policy) and note 4.2 (financial disclosures)*	**2021/2022 Revenues** Pressures on achieving internal and external expectations of results increase the risk of fraudulent revenue recognition, in particular the recognition of sales around the year-end date.	Our procedures included: — **Independent confirmation:** We obtained direct confirmation of receivables balances held by a sample of customers at the year-end date to agree revenue associated with product delivered into Supplier Managed Inventory, — **Test of details:** We agreed a sample of sales transactions around the year-end, based upon their financial significance, to purchase order and external delivery confirmation, to assess whether the performance obligation has been met and that revenue has not been overstated or understated at the year-end date, — **Test of details:** We agreed a sample of post year-end credit notes, based upon their financial significance, to sales order and external delivery confirmation, to assess that revenue has not been overstated at the year-end date, We performed the tests above rather than seeking to rely on any of the group's controls because the number of transactions relating to the risk period meant that detailed testing is inherently the most effective means of obtaining audit evidence.
Parent Company: Valuation of investments in and recoverability of receivables from subsidiaries (Investments: £76.1 million, 2020: £91.4 million, Receivables: £132.7 million, 2020: £133.3 million) *Refer to notes 2.10 and 2.29 (accounting policy) and notes 16 and 18 (financial disclosures)*	**Forecast based assessment** The carrying amount of the parent company's investments in and receivables from subsidiaries represents 95% (2020: 95%) of the company's total assets. While their recoverable amount is subjective due to the inherent uncertainty involved in forecasting and discounting future cash flows, it is not considered to be at a high risk of significant misstatement or subject to significant judgement. However, due to their materiality in the context of the parent company financial statements, this is considered to be the area that had the greatest effect on our overall parent company audit.	Our procedures included: **Test of detail:** We compared the carrying amount of 100% of investments and receivables with the relevant subsidiaries' balance sheet to identify whether their net assets, being an approximation of their minimum recoverable amount, were in excess of their carrying amount and assessing whether those subsidiaries have historically been profit-making. **Assessing subsidiary audit:** We assessed the work performed by the component auditor of the relevant subsidiary and considered the results of that work on that subsidiary's profit and net assets. **Comparing valuations:** For the investments and receivables where the carrying amount exceeded the net asset value, we compared their carrying amount with the expected value of the business based on the subsidiaries' value in use. We performed the tests above rather than seeking to rely on any of the group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described.

Financial Statements

KPMG

2. Key audit matters: our assessment of risks of material misstatement (continued)

	The risk	Our response
Going concern *Refer to note 2.2 (accounting policy and financial disclosures).*	**Disclosure Quality** The financial statements explain how the Board has formed a judgement that it is appropriate to adopt the going concern basis of preparation for the Group and parent company. That judgement is based on an evaluation of the inherent risks to the Group's and Company's business model, and how those risks might affect the Group's and Company's financial resources or ability to continue operations for a period of at least 12 months from the date of approval of the financial statements. The risks most likely to adversely affect the Group's and Company's available financial resources and metrics relevant to debt covenants over this period were: — Uncertainty in the timing and level of cash flow forecasts and revenue growth which are inherently linked to the global demand for smartphones and the adoption of forthcoming technologies such as 5G, — While undrawn at the balance sheet date, the Group's revolving credit facility expires in April 2023, a one year extension option is available but is subject to bank consent. There are also less predictable but realistic second order impacts, such as the impact of Covid-19 on customer demand, the availability of debt and other financing arrangements and the impact on the wider supply chain, which could result in a reduction of available financial resources. The risk for our audit was whether or not those risks were such that they amounted to a material uncertainty that may have cast significant doubt about the ability to continue as a going concern. Had they been such, then that fact would have been required to have been disclosed.	We considered whether these risks could plausibly affect the liquidity or covenant compliance in the going concern period by assessing the directors' sensitivities over the level of available financial resources and covenant thresholds indicated by the Group's financial forecasts taking account of severe, but plausible, adverse effects that could arise from these risks individually and collectively. Our procedures also included: — **Funding assessment:** We obtained relevant loan agreements and evidence of the revolving credit facility, agreeing facilities available to the Group and recalculated covenant compliance and headroom based on management's latest forecasts and those in severe but plausible downside scenarios. — **Our Covid-19 knowledge:** We considered the directors' assessment of Covid-19 related sources of risk for the Group's business and financial resources compared with our own understanding of the risks. This included assessing the effects of the pandemic on the Group over the past two years as well as government guidance on critical industry and key worker status. — **Our sector experience:** We critically assessed the directors' going concern assessment, including the reasonableness of the key assumptions used in the cash flow forecasts and the level of downside sensitivities applied using our industry knowledge of risks and external market research. — **Evaluating directors' intent:** We evaluated the achievability of the actions the Directors consider they would take to improve the position should the risks materialise. This included assessing the intent and ability of the Directors to implement these actions in the time frame required and that they were entirely in the Directors' control. — **Assessing transparency:** We assessed the completeness and accuracy of the matters covered in the going concern disclosures by comparing this to the key assumptions, key sensitivities and mitigating actions considered by the Directors.

3. Our application of materiality and an overview of the scope of our audit

Materiality for the group financial statements as a whole was set at £1,200k (2020: £1,250k), determined with reference to a benchmark of revenue of which it represents 0.8% (2020: 0.7%).

We consider total revenue to be the most appropriate benchmark as it provides a more stable measure in the group's continued transition to mass market production. The level of materiality reflects the size of the group.

Materiality for the parent company financial statements as a whole was set at £1,199k (2020: £500k) determined with reference to a benchmark of parent company total assets, limited to be less than materiality for group materiality as a whole. It represents 0.6% (2020: 0.2%) of the stated benchmark.

In line with our audit methodology, our procedures on individual account balances and disclosures were performed to a lower threshold, performance materiality, so as to reduce to an acceptable level the risk that individually immaterial misstatements in individual account balances add up to a material amount across the financial statements as a whole.

Performance materiality was set at 75% (2020: 75%) of materiality for the financial statements as a whole, which equates to £900k (2020: £935k) for the group and £899k (2020: £375k) for the parent company. We applied this percentage in our determination of performance materiality because we did not identify any factors indicating an elevated level of risk.

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £60k (2020: £62k), in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the group's 18 (2020: 18) reporting components, we subjected 6 (2020: 7) to full scope audits for group purposes and 1 (2020: 3) to specified risk-focused audit procedures. The latter were not individually financially significant enough to require a full scope audit for group purposes, but did present specific individual risks that needed to be addressed.

The components within the scope of our work accounted for the percentages illustrated opposite. The remaining 12% (2020: 9%) of total group revenue and 13% (2020: 7%) of total group assets is represented by 11 (2020: 8) reporting components, none of which individually represented more than 5% (2020: 5%) of total group revenue or total group assets. For these residual components, we performed analysis at a group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The Group team approved the component materialities, which ranged from £400k to £850k (2020: £350k to £750k), having regard to the mix of size and risk profile of the Group across the components.

The Group team instructed one component auditor in respect of one location as to the significant areas to be covered, including the relevant risks and the information to be reported back. Work performed on all other components was performed by the group team.

Video and telephone conference meetings were held with the component auditor. At these meetings, the findings reported to the Group team were discussed in more detail, and any further work required by the Group team was then performed by the component auditor.

The scope of the audit work performed was predominately substantive as we placed limited reliance upon the Group's internal control over financial reporting.

Financial Statements

KPMG

4. We have nothing to report on going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Group or the Company or to cease their operations, and as they have concluded that the Group's and the Company's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for a period of at least 12 months from the date of approval of the financial statements ("the going concern period").

An explanation of how we evaluated management's assessment of going concern is set out in the related key audit matter in section 2 of this report.

Our conclusions based on this work:

— we consider that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate;

— we have not identified, and concur with the Directors' assessment that there is not, a material uncertainty related to events or conditions that, individually or collectively, may cast significant doubt on the Group's or Company's ability to continue as a going concern for the going concern period;

— we have nothing material to add or draw attention to in relation to the Directors' statement in note 2.2 to the financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and Company's use of that basis for the going concern period and we found the going concern disclosure in note 2.2 to be acceptable; and

— the related statement given as if the Listing Rules applied set out on page 45 is materially consistent with our audit knowledge.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the above conclusions are not a guarantee that the Group or the Company will continue in operation.

5. Fraud and breaches of laws and regulations – ability to detect

Identifying and responding to risks of material misstatement due to fraud

To identify risks of material misstatement due to fraud ("fraud risks") we assessed events or conditions that could indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud. Our risk assessment procedures included:

— Enquiring of directors, the audit committee and the company secretary and inspection of policy documentation as to the Group's high-level policies and procedures to prevent and detect fraud, including the Group's channel for "whistleblowing", as well as whether they have knowledge of any actual, suspected or alleged fraud.

— Reading Board, audit committee and remuneration meeting minutes.

— Considering remuneration incentive schemes and performance targets for directors and management including bonus targets and Long Term Incentive Plan EPS growth targets for director and management remuneration.

We communicated identified fraud risks throughout the audit and remained alert to any indications of fraud throughout the audit. This included communication from the group to the one full scope component audit team of relevant fraud risks identified at the Group level and request to the full scope component audit team to report to the Group audit team any instances of fraud that could give rise to a material misstatement at group.

As required by auditing standards, and taking into account possible pressures to meet profit targets and revisions to market guidance, we perform procedures to address the risk of management override of controls and the risk of fraudulent revenue recognition, in particular the risk that revenue is recorded in the wrong period.

We also identified a fraud risk related to the valuation of goodwill and intangible assets not yet available for use. There is a risk that Group management may be in a position to make inappropriate accounting entries or include bias in the accounting estimates and judgements in order to meet target results or to overstate the future value of the business.

Further detail in respect of these risks are set out in the key audit matter disclosures in section 2 of this report.

We also performed procedures including:

— Identifying journal entries for all full scope components to test based on risk criteria and comparing the identified entries to supporting documentation. These included revenue and cash entries to unexpected accounts.

— Assessing significant accounting estimates for bias.

5. Fraud and breaches of laws and regulations – ability to detect (continued)

Identifying and responding to risks of material misstatement due to non-compliance with laws and regulations

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general commercial and sector experience and through discussion with the directors and other management (as required by auditing standards), and from inspection of the Group's regulatory and legal correspondence and discussed with the directors and other management the policies and procedures regarding compliance with laws and regulations.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. This included communication from the group to the one full-scope component audit team of relevant laws and regulations identified at the Group level, and a request for the full scope component auditor to report to the group team any instances of non-compliance with laws and regulations that could give rise to a material misstatement at group level.

The potential effect of these laws and regulations on the financial statements varies considerably.

Firstly, the Group is subject to laws and regulations that directly affect the financial statements including financial reporting legislation (including related companies legislation), distributable profits legislation and taxation legislation and we assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

Secondly, the Group is subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements, for instance through the imposition of fines or litigation. We identified the following areas as those most likely to have such an effect: health and safety, environmental and hazardous material legislation, export control legislation, anti-bribery, employment law and certain aspects of company legislation, recognising the nature of the Group's global manufacturing and development activities. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of the directors and other management and inspection of regulatory and legal correspondence, if any. Therefore if a breach of operational regulations is not disclosed to us or evident from relevant correspondence, an audit will not detect that breach.

5. Fraud and breaches of laws and regulations – ability to detect (continued)

Context of the ability of the audit to detect fraud or breaches of law or regulation

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely the inherently limited procedures required by auditing standards would identify it.

In addition, as with any audit, there remained a higher risk of non-detection of fraud, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. Our audit procedures are designed to detect material misstatement. We are not responsible for preventing non-compliance or fraud and cannot be expected to detect non-compliance with all laws and regulations.

6. We have nothing to report on the other information in the Annual Report

The directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the *information therein is materially* misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

Based solely on our work on the other information:

— we have not identified material misstatements in the strategic report and the directors' report,

— in our opinion the information given in those reports for the financial year is consistent with the financial statements, and

— in our opinion those reports have been prepared in accordance with the Companies Act 2006.

We are required to perform procedures to identify whether there is a material inconsistency between the directors' disclosures in respect of emerging and principal risks and the viability statement, and the financial statements and our audit knowledge

Based on those procedures, we have nothing material to add or draw attention to in relation to:

— the directors' confirmation within the long term viability statement on page 45 that they have carried out a robust assessment of the emerging and principal risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity,

— the Principal Risks disclosures describing these risks and how emerging risks are identified, and explaining how they are being managed and mitigated, and

— the directors' explanation in the long term viability statement of how they have assessed the prospects of the Group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group 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

Our work is limited to assessing these matters in the context of only the knowledge acquired during our financial statements audit. As we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgments that were reasonable at the time they were made, the absence of anything to report on these statements is not a guarantee as to the Group's and Company's longer-term viability

We are required to perform procedures to identify whether there is a material inconsistency between the directors' corporate governance disclosures and the financial statements and our audit knowledge.

Based on those procedures, we have concluded that each of the following is materially consistent with the financial statements and our audit knowledge:

— the directors' statement that they 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 Group's position and performance, business model and strategy; or

— the section of the annual report describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee, and how these issues were addressed, and

— the section of the annual report that describes the review of the effectiveness of the Group's risk management and internal control systems.

In addition to our audit of the financial statements, the directors have engaged us to review their Corporate Governance Statement as if the company were required to *comply with the Listing Rules and the Disclosure Guidance* and Transparency Rules of the Financial Conduct Authority in relation to those matters. Under the terms of our engagement we are required to review the part of the Corporate Governance Statement relating to the Company's compliance with the provisions of the UK Corporate Governance Code specified for our review.

We have nothing to report in these respects.

7. **We have nothing to report on the other matters on which we are required to report by exception**

Under the Companies Act 2006, we are required 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 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.

We have nothing to report in these respects.

8 **Respective responsibilities**

As explained more fully in their statement set out on page 76, the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; 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 they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

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 our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at [illegible]

9. **The purpose of our audit work and to whom we owe our responsibilities**

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 and terms of our engagement by the Company. 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 the further matters we are required to state to them in accordance with the terms agreed with the Company, 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.

Andrew Campbell-Orde

Andrew Campbell-Orde (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
3 Assembly Square
Britannia Quay
Cardiff
CF10 4AX

29 March 2022

Five-year financial summary

	2021 £'000	2020 £'000	2019 £'000	2018 £'000	2017 £'000
Revenue	**154,096**	**178,016**	**140,015**	**156,291**	**154,553**
Adjusted EBITDA (see below)	**18,679**	**30,101**	**16,246**	**26,404**	**37,152**
Operating (loss)/profit					
• Adjusted*	(6,151)	5,386	(4,676)	16,040	26,534
• Reported	(19,978)	(5,517)	(18,802)	8,660	17,194
(Loss)/profit after tax					
• Adjusted*	(19,281)	2,702	(19,010)	11,229	24,998
• Reported	(31,002)	(2,893)	(35,128)	1,159	14,660
Net cash flow from operations					
Before adjustments (note 5)	17,940	36,324	16,530	16,982	31,089
Reported	18,863	35,157	8,948	16,988	29,717
Free cash flow**					
Before exceptional cash flows	(1,640)	24,929	(25,445)	(26,045)	(2,045)
Reported	(697)	24,062	(33,027)	(26,039)	(4,317)
Net (debt)/cash excluding lease liabilities***	**(5,804)**	**1,923**	**(15,970)**	**20,807**	**45,612**
Equity shareholders' funds	**234,621**	**260,435**	**266,593**	**305,730**	**287,950**
Basic EPS – adjusted****	**(2.41p)**	**0.29p**	**(2.46p)**	**1.44p**	**3.61p**
Basic EPS – unadjusted	**(3.87p)**	**(0.41p)**	**(4.51p)**	**0.13p**	**2.11p**
Diluted EPS – adjusted****	**(2.41p)**	**0.29p**	**(2.46p)**	**1.38p**	**3.38p**
Diluted EPS – unadjusted	**(3.87p)**	**(0.41p)**	**(4.51p)**	**0.12p**	**1.98p**

* [illegible]

** [illegible]

*** [illegible]

**** [illegible]

Adjusted EBITDA has been calculated as follows:

	2021 £'000	2020 £'000	2019 £'000	2018 £'000	2017 £'000
(Loss)/profit after tax	(31,002)	(2,893)	(35,128)	1,189	14,660
Tax charge/(credit)	8,811	(1,001)	10,180	5,558	435
Interest expense/(income)	2,213	2,165	1,458	(87)	2,099
Share based payments	1,691	265	(771)	(1,044)	7,526
(Profit)/Loss on disposal of PPE	(77)	182	(245)	–	22
Adjusted items	11,833	6,850	18,463	7,906	385
Depreciation of PPE	13,309	12,983	10,477	6,773	5,637
Depreciation of right of use asset	3,854	3,681	3,590	–	–
Amortisation of intangible assets	8,047	7,869	8,222	6,109	6,388
Adjusted EBITDA	18,679	30,101	16,246	26,404	37,152

Consolidated income statement

For the year ended 31 December 2021

	Note	2021 £'000	2020 £'000
Revenue	4	**154,096**	**178,016**
Cost of sales		(136,452)	(144,866)
Gross profit		**17,644**	**33,150**
Selling, general and administrative expenses		(37,699)	(34,697)
Impairment loss on financial assets	5		(3,788)
Profit on disposal of property, plant and equipment	5	77	(182)
Operating loss	6	**(19,978)**	**(5,517)**
Finance costs	8	(2,213)	(2,155)
Reversal of share of losses of joint ventures accounted for using the equity method	30		3,788
Adjusted (loss)/profit before income tax		**(8,667)**	**3,221**
Adjustments	5	(13,524)	(7,115)
Loss before income tax		**(22,191)**	**(3,894)**
Taxation	9	(8,811)	1,001
Loss for the year		**(31,002)**	**(2,893)**
Loss attributable to:			
Equity shareholders		(31,002)	(3,271)
Non controlling interest			378
		(31,002)	(2,893)
Loss per share attributable to owners of the parent during the year			
Basic loss per share	12	(3.87p)	(0.41p)
Diluted loss earnings per share	12	(3.87p)	(0.41p)

Adjusted basic and diluted loss per share are presented in note 12.

All items included in the loss for the year relate to continuing operations.

Non controlling interest relates to minority shareholder interests in the Group's subsidiary, IQE Taiwan ROC, prior to the acquisition of the minority shareholding on 5 October 2020 (note 31).

The company has elected to take the exemption under section 408 of the Companies Act 2006 from presenting the parent company profit and loss account.

The notes on pages 96 to 113 form an integral part of these consolidated financial statements.

Consolidated statement of comprehensive income

For the year ended 31 December 2021

	2021 £'000	2020 £'000
Loss for the year	(31,002)	(2,893)
Exchange differences on translation of foreign operations*	4,744	(6,104)
Total comprehensive expense for the year	**(26,258)**	**(8,997)**
Total comprehensive expense attributable to:		
Equity shareholders	(26,258)	(9,182)
Non controlling interest		185
	(26,258)	**(8,997)**

* Items that may subsequently be reclassified to profit or loss

Items in the statement above are disclosed net of tax. The income tax relating to each component of other comprehensive expense is disclosed in note 9.

The notes on pages 96 to 143 form an integral part of these consolidated financial statements.

Financial Statements

Consolidated balance sheet

As at 31 December 2021

	Note	2021 £'000	2020 £'000
Non-current assets			
Intangible assets	13	95,866	105,772
Fixed asset investments	16		
Property, plant and equipment	14	129,730	126,229
Right of use assets	15	41,267	37,339
Deferred tax assets	10		7,821
Other financial assets	18		
Total non-current assets		**269,863**	**277,161**
Current assets			
Inventories	17	31,710	30,887
Trade and other receivables	18	38,860	38,575
Cash and cash equivalents		10,791	24,663
Total current assets		**81,361**	**94,125**
Total assets		**351,224**	**371,286**
Current liabilities			
Trade and other payables	19	(37,083)	(35,605)
Current tax liabilities		(1,342)	(1,426)
Bank borrowings	20	(6,230)	(6,201)
Lease liabilities	20	(4,694)	(4,798)
Provisions for other liabilities and charges	21	(3,686)	(515)
Total current liabilities		**(53,035)**	**(48,545)**
Non-current liabilities			
Bank borrowings	20	(10,365)	(16,559)
Lease liabilities	20	(49,693)	(42,226)
Deferred tax liabilities	10	(2,060)	(2,051)
Provisions for other liabilities and charges	21	(1,150)	(1,487)
Total non-current liabilities		**(63,568)**	**(62,306)**
Total liabilities		**(116,603)**	**(110,851)**
Net assets		**234,621**	**260,435**
Equity attributable to the shareholders of the parent			
Share capital	23	8,036	8,004
Share premium		154,632	151,185
Retained earnings		29,295	62,089
Exchange rate reserve		26,035	21,291
Other reserves		16,623	17,866
		234,621	**260,435**
Non-controlling interest			
Total equity		**234,621**	**260,435**

The notes on pages 96 to 133 form an integral part of these consolidated financial statements. The financial statements on pages 88 to 133 were authorised for issue by the Board of Directors and approved on 29 March 2022 and were signed on its behalf.

Mr T Pullen **Mr A Lemos**

Consolidated statement of changes in equity

For the year ended 31 December 2021

	Share capital £'000	Share premium £'000	Retained earnings £'000	Exchange Rate reserve £'000	Other reserves £'000	Non-controlling interests £'000	Total equity £'000
At 1 January 2021	**8,004**	**154,185**	**62,089**	**21,291**	**14,866**	**–**	**260,435**
Comprehensive expense							
Loss for the year			(31,002)				(31,002)
Other comprehensive income for the year				4,744			4,744
Total comprehensive expense for the year	**–**	**–**	**(31,002)**	**4,744**	**–**	**–**	**(26,258)**
Transactions with owners							
Share based payments					1,850		1,850
Tax relating to share options					(93)		(93)
Proceeds from shares issued	32	447					479
Acquisition of non controlling interest	–		(1,792)				(1,792)
Total transactions with owners	**32**	**447**	**(1,792)**	**–**	**1,757**	**–**	**444**
At 31 December 2021	**8,036**	**154,632**	**29,295**	**26,035**	**16,623**	**–**	**234,621**

	Share capital £'000	Share premium £'000	Retained earnings £'000	Exchange Rate reserve £'000	Other reserves £'000	Non-controlling interests £'000	Total equity £'000
At 1 January 2020	**7,961**	**152,385**	**63,826**	**27,502**	**14,919**	**3,850**	**270,443**
Comprehensive expense							
(Loss)/profit for the year			(3,271)			378	(2,893)
Other comprehensive expense for the year				(6,211)		107	(6,104)
Total comprehensive expense for the year	**–**	**–**	**(3,271)**	**(6,211)**	**–**	**485**	**(8,997)**
Transactions with owners							
Share based payments					55		55
Tax relating to share options					57		57
Proceeds from shares issued	17	388			(165)		240
Acquisition of non controlling interest	26	1,112	1,534			(4,335)	(1,363)
Total transactions with owners	**43**	**1,800**	**1,534**	**–**	**(53)**	**(4,335)**	**(1,011)**
At 31 December 2020	**8,004**	**154,185**	**62,089**	**21,291**	**14,866**	**–**	**260,435**

Other reserves relate to share based payments.

The notes on pages 96 to 143 form an integral part of these consolidated financial statements.

Consolidated cash flow statement

For the year ended 31 December 2021

	Note	2021 £'000	Restated 2020 £'000
Cash flows from operating activities			
Adjusted cash inflow from operations		**17,940**	**36,324**
Cash impact of adjustments	5	943	(867)
Cash generated from operations	26	**18,883**	**35,457**
Net interest paid		(2,213)	(2,358)
Income tax paid		(1,275)	(993)
Net cash generated from operating activities		**15,395**	**32,106**
Cash flows from investing activities			
Purchase of property, plant and equipment		(15,051)	(4,993)
Purchase of intangible assets		(345)	(731)
Capitalised development expenditure		(2,994)	(4,678)
Proceeds from disposal of property, plant and equipment		85	
Net cash used in investing activities		**(18,305)**	**(10,402)**
Cash flows from financing activities			
Acquisition of minority interest		(1,792)	(1,363)
Proceeds from issuance of ordinary shares		472	240
Proceeds from borrowings	27		5,000
Repayment of borrowings	27	(6,145)	(7,030)
Payment of lease liabilities	27	(3,705)	(2,548)
Net cash used in financing activities		**(11,170)**	**(5,701)**
Net (decrease)/increase in cash and cash equivalents		**(14,080)**	**16,003**
Cash and cash equivalents at 1 January		24,663	8,800
Exchange losses on cash and cash equivalents		208	(140)
Cash and cash equivalents at 31 December		**10,791**	**24,663**

The notes on pages 96 to 143 form an integral part of these consolidated financial statements.

The comparative financial information for 2020 has been restated to reclassify cash flows associated with Acquisition of minority interest from investing activities to financing activities and to reclassify interest on lease cash flows from financing activities to net interest paid in cash generated from operating activities. The reclassifications have had no impact on net assets, loss after tax or total cash flow for 2020.

Parent company balance sheet

For the year ended 31 December 2021

	Note	2021 £'000	2020 £'000
Non-current assets			
Intangible assets	13	1,043	3,713
Property, plant and equipment	14	107	15
Investments	16	76,969	91,420
Deferred tax assets	10	127	3,975
Trade and other receivables	18	132,677	133,314
Total non-current assets		**210,923**	**232,437**
Current assets			
Trade and other receivables	18	2,125	2,609
Cash and cash equivalents		262	635
Total current assets		**2,387**	**3,244**
Total assets		**213,310**	**235,681**
Current liabilities			
Trade and other payables	19	(30,387)	(25,631)
Bank borrowings	20		
Provisions for other liabilities and charges	21	(740)	(515)
Total current liabilities		**(31,127)**	**(26,146)**
Non-current liabilities			
Bank borrowings	20		
Provisions for other liabilities and charges	21	(962)	(1,325)
Total non-current liabilities		**(962)**	**(1,325)**
Total liabilities		**(32,089)**	**(27,471)**
Net assets		**181,221**	**208,210**
Shareholders' equity			
Share capital	23	8,036	8,004
Share premium		154,632	154,185
Retained earnings		1,829	31,101
Other reserves		16,724	14,920
Total equity		**181,221**	**208,210**

The parent company's loss for the financial year amounted to £29,272,000 (2020: £7,586,000 loss).

The notes on pages 96 to 143 form an integral part of these consolidated financial statements.

The financial statements on pages 88 to 143 were authorised for issue by the Board of Directors and approved on 29 March 2022 and were signed on its behalf.

Mr T Pullen **Mr A Lemos**

Financial Statements

Parent company statement of changes in equity

For the year ended 31 December 2021

	Share capital £'000	Share premium £'000	Retained earnings £'000	Other reserves £'000	Total Equity £'000
At 1 January 2021	**8,004**	**154,185**	**31,101**	**14,920**	**208,210**
Comprehensive expense					
Loss for the year			(29,272)		(29,272)
Total comprehensive expense	**–**	**–**	**(29,272)**	**–**	**(29,272)**
Transactions with owners					
Share based payments				1,850	1,850
Tax relating to share options				(46)	(46)
Proceeds from shares issued	32	447			479
Total transactions with owners	**32**	**447**	**–**	**1,804**	**2,283**
At 31 December 2021	**8,036**	**154,632**	**1,829**	**16,724**	**181,221**

	Share capital £'000	Share premium £'000	Retained earnings £'000	Other reserves £'000	Total Equity £'000
At 1 January 2020	**7,961**	**152,385**	**38,687**	**15,004**	**214,037**
Comprehensive expense					
Loss for the year			(7,586)		(7,586)
Total comprehensive expense	**–**	**–**	**(7,586)**	**–**	**(7,586)**
Transactions with owners					
Share based payments				55	55
Tax relating to share options				26	26
Proceeds from shares issued	43	1,800		(165)	1,678
Total transactions with owners	**43**	**1,800**	**–**	**(84)**	**1,759**
At 31 December 2020	**8,004**	**154,185**	**31,101**	**14,920**	**208,210**

Other reserves relate to share based payments.

The notes on pages 96 to 113 form an integral part of these consolidated financial statements.

Parent company cash flow statement

For the year ended 31 December 2021

	Note	2021 £'000	2020 £'000
Cash flows from operating activities			
Cash outflow from operations	26	(2,337)	(2,336)
Interest received		1,905	1,812
Income tax paid			
Net cash used in operating activities		**(432)**	**(494)**
Purchase of intangible assets		(314)	(845)
Purchase of property, plant and equipment		(106)	(12)
Net cash used in investing activities		**(420)**	**(857)**
Cash flows from financing activities			
Proceeds from issuance of ordinary shares		479	240
Proceeds from borrowings			5,000
Repayments of borrowings			(5,000)
Net cash generated from financing activities		**479**	**240**
Net decrease in cash and cash equivalents		**(373)**	**(1,111)**
Cash and cash equivalents at 1 January		635	1,746
Cash and cash equivalents at 31 December		**262**	**635**

The notes on pages 96 to 143 form an integral part of these consolidated financial statements.

Notes to the financial statements

For the year ended 31 December 2021

1. General information

IQE plc ('the company') and its subsidiaries (together 'the Group') develop, manufacture and sell advanced semiconductor materials. The Group has manufacturing facilities in Europe, United States of America and Asia and sells to customers located globally.

IQE plc is a public limited company incorporated in the United Kingdom under the Companies Act 2006. The Company is domiciled in the United Kingdom and is quoted on the Alternative Investment Market (AIM). The address of the Company's registered office is Pascal Close, St Mellons, Cardiff CF3 0LW.

2. Significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all years presented.

2.1 Basis of preparation

The financial statements have been prepared and approved by the directors in accordance with international accounting standards in conformity with UK adopted international accounting standards ("UK adopted IFRS"). The financial statements have been prepared under the historical cost convention except where fair value measurement is required by IFRS.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in note 3.

2.2 Going concern

The Group made a loss of £31,002,000 (2020: £2,893,000 loss) and used £13,872,000 of cash and cash equivalents (2020: £15,863,000 generated) resulting in a net debt position (excluding lease liabilities) of £5,804,000 (2020: £1,923,000 net cash) as at 31 December 2021.

The following matters have been considered by the directors in determining the appropriateness of the going concern basis of preparation in the financial statements:

- The Group's operations are geographically diversified. Manufacturing operations are located at ten different sites across three continents, significantly reducing the impact of potential disruption at any single site as a result of the ongoing Coronavirus pandemic. All manufacturing sites continue to remain operational and production has not been affected by any disruption at any of the Group's global sites.
- The Group dual or multi sources key raw materials (substrates, gases, source and consumables) wherever possible, from a broad range of global suppliers reducing the likelihood of potential disruption to production from any single supplier. The Group continues to work closely with suppliers and customers to manage inventory levels in order to create supply chain resilience against potential disruption. All manufacturing sites continue to remain operational and production has not been affected by any supply chain disruption.
- The Group's trading has remained resilient throughout the year ended 31 December 2021 although the ongoing softness in smartphone related demand, weakness in 5G infrastructure demand and ongoing foreign exchange headwinds have resulted in a decline in revenue for the year to £154,096,000 (2020: £178,016,000) and an adjusted loss before tax of £8,667,000 (2020: £3,221,000 profit).
- The Group's net debt (excluding lease liabilities) position of £5,804,000 (2020: £1,923,000 funds) remains low in the context of total available facilities of £55,900,000 (2020: £55,550,000) with the increase in the net debt position principally reflecting the Group's investment activities where investment in technology development and capacity expansion in the second half of 2021 has exceeded cash generated from operations. Net debt (excluding lease liabilities) consists of £10,791,000 (2020: £24,633,000) of cash net of bank loans of £16,595,000 (2020: £22,710,000) which are repayable over a period to 29 August 2024.
- On 24 January 2019, the Group agreed a new £25,900,000 ($35,000,000) three-year multi-currency revolving credit facility from HSBC Bank plc. On 30 December 2021 the multi-currency revolving credit facility was extended for an additional 15 month period to 30 April 2023 and includes an option that requires HSBC Bank plc consent to extend the facility for a further 12 month period to 30 April 2024. The Group has complied with all covenants associated with the facility.
- On 29 August 2019, the Group agreed a new £30,000,000 five-year Asset Finance Loan facility from HSBC Bank plc of which £25,000,000 has been drawn. The Group has complied with all covenants associated with the facility.
- The Group generated cash from operating activities of £15,395,000 (2020: £32,106,000) and its financial forecasts and projections for the period up to and including 31 December 2023 show that the Group is forecast to continue to comply with its banking covenants and has adequate cash resources to continue operating for the foreseeable future.
- The Group's severe but plausible downside financial forecasts have been produced with significant reductions to future forecast revenues designed to reflect severe downside scenarios associated with demand risk for the period to 31 December 2023. The severe but plausible downside scenario applied to the Group's financial forecasts, which take account of current trading and customer demand, assumes a 17% reduction in 2022 revenues and a 31% reduction in 2023 revenues partially offset by mitigation within the control of the company including deferral of investment in [illegible] costs and [illegible] projects across the forecast period. The severe but plausible downside scenario illustrates that the Group would be able to continue to comply with its banking covenants but would require the exercise of the extension option [illegible] in the revolving credit facility from HSBC Bank plc beyond the [illegible] of the revolving credit facility at the extension option date in April 2023. The severe but plausible downside scenario illustrates that a facility of £16,500,000 is significantly below the Group's current committed revolving credit facility of £25,900,000 could be required in 2023. The Group has a long standing and trusted relationship with its bankers, HSBC Bank plc, who remain supportive and who have, at the date of this report formally extended the Group's £25,900,000 ($35,000,000) revolving credit facility until April 2023 with an option that requires HSBC Bank plc consent to extend the facility for a further 12 month period. On this basis, the directors consider that the Group [illegible] adequate [illegible] to continue [illegible] for the foreseeable future [illegible]

2.2 Going concern

The Group meets its day to day working capital and other cash requirements through its bank facilities and available cash. The Group's cash flow forecasts and projections, in conjunction with the level of assessed covenant headroom on the Group's committed bank facilities show that the Group and the Company have adequate cash resources to continue operating and to meet its liabilities as they fall due for a period of at least 12 months from the date of approval of the financial statements, such that the directors consider it appropriate to adopt the going concern basis of accounting in preparing the consolidated financial statements.

2.3 Changes in accounting policy and disclosures

(a) New standards, amendments and interpretations.

The following new standards, amendments and interpretations have been adopted by the Group for the first time for the financial year beginning on 1 January 2021.

- Amendments to IFRS 9 'Financial Instruments', IAS 39 'Financial Instruments: Recognition and Measurement', IFRS 7 'Financial Instruments: Disclosures', IFRS 4 'Insurance Contracts', IFRS 16 'Leases' related to interest rate benchmark reform (phase two) and the issues that arise from the implementation of the reforms, including the replacement of one benchmark with an alternative one.
- Amendment to IFRS 16 'Leases' which provides an optional practical expedient for lessees from assessing whether a rent concession related to COVID-19 is a lease modification.
- Amendments to IFRS 16 'Leases' which provides an extension to an optional practical expedient for lessees from assessing whether a rent concession related to COVID-19 is a lease modification beyond 30 June 2021.

The adoption of these standards, amendments and interpretations has not had a material impact on the financial statements of the Group or parent company.

(b) New standards, amendments and interpretations issued but not effective and not adopted early

A number of new standards, amendments to standards and interpretations which are set out below are effective for annual periods beginning after 1 January 2021 and have not been applied in preparing these consolidated financial statements.

- Amendment to IFRS 3 'Business combinations' to update references to the Conceptual Framework for Financial Reporting without changing the accounting requirements for business combinations.
- Amendments to IAS 16 'Property, plant and equipment' to prohibit the deduction from cost of property, plant and equipment amounts received from selling items produced while preparing the asset for its intended use with any such sales and related cost recognised in profit or loss.
- Amendments to IAS 37 'Provisions, contingent liabilities and contingent assets' to specify which costs a company includes when assessing whether a contract will be loss-making.
- Annual improvements to IFRSs 2018-2020 cycle to make minor amendments to IFRS 1 'First-time adoption of IFRS', IFRS 9 'Financial Instruments', IAS 41 'Agriculture' and amendments to the illustrative examples accompanying IFRS 16 'Leases'.
- IFRS 17 'Insurance contracts' which establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4 'Insurance Contracts'.
- Amendments to IAS 1 'Presentation of financial statements' on the classification of liabilities which is intended to clarify that liabilities are classified as either current or non-current depending upon the rights that exist at the end of the reporting period and amendments to the disclosure of accounting policies which now require disclosure of material rather than significant accounting policies.
- Amendment to IAS 8 'Accounting policies, changes in accounting estimates and errors' to introduce a new definition for accounting estimates which clarifies that an accounting estimate is a monetary amount in the financial statements that is subject to measurement uncertainty.
- Amendment to IAS 12 'Income taxes' to clarify the accounting treatment for deferred tax on certain transactions with a narrowing of the scope of the initial recognition exemption so that it does not apply to transactions that give rise to equal and offsetting temporary differences.

The Directors anticipate that at the time of this report none of the new standards, amendments to standards and interpretations are expected to have a material effect on the financial statements of the Group or parent company.

2.4 Consolidation

The consolidated financial statements comprise the results of IQE plc (the Company) and its subsidiary undertakings, together with the Group's share of the results of its associates and joint ventures.

Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group and are de-consolidated from the date that control ceases.

Inter-company transactions, balances and unrealised gains or losses on transactions between Group companies are eliminated and accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

2. Significant accounting policies continued

2.4 Consolidation continued

Joint ventures

The Group applies IFRS 11 to all joint arrangements. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The nature of the Group's joint arrangements has been assessed and each joint arrangement has been determined to be a joint venture. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and movements in other comprehensive income.

Gains by the Group on transactions with joint ventures are eliminated against the carrying value of the Group's interest in its joint ventures to the extent that the gain does not exceed the carrying amount. In circumstances where a gain exceeds the carrying amount the Group has made an accounting policy choice to recognise the gain in the comprehensive income statement, subject to an assessment of recoverability of value from the joint venture rather than recognising the gain as deferred income in the consolidated balance sheet.

When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint ventures), the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint ventures. Unrealised gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

Business combinations

The Group accounts for business combinations using the acquisition method when control is transferred to the Group. The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment. Any gain on bargain purchase is recognised in profit or loss immediately. Transaction costs are expensed as incurred, except if related to the issue of debt or equity securities. The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in profit or loss.

Where the fair values of acquired identifiable assets, liabilities and contingent liabilities are initially recognised on a provisional basis, these are reassessed during the 12-month period following the date of the business combination. Adjustments to the fair values as at the date of acquisition that result from new information that existed at the date of acquisition, which if known at the time would have resulted in a different amount being recognised within this 'measurement period' are recorded, with any net impact being added to or deducted from the goodwill recognised. Such adjustments are recognised in both the current period and restated comparative period balance sheets as if the final fair values had been used in the initial recognition of the acquisition. Subsequent to the measurement period, any adjustments to the recorded fair value of identifiable assets, liabilities and contingent liabilities are taken through the income statement as an exceptional income or expense.

The Group recognises any non-controlling interest in an acquisition on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of the acquiree's identifiable net assets.

Acquisition-related costs are expensed as incurred.

2.5 Intangible assets

a) Goodwill

Goodwill arising on an acquisition is recognised as an asset and initially measured at cost, being the excess of the fair value of the consideration over the fair value of the identifiable assets, liabilities and contingent liabilities acquired.

Goodwill is not amortised but is reviewed for potential impairment at least annually or more frequently if events or circumstances indicate a potential impairment. For the purpose of impairment testing, goodwill is allocated to each of the Cash Generating Units to which it relates. Any impairment identified is immediately charged to the Consolidated Income Statement. Subsequent reversals of impairment losses for goodwill are not recognised.

Negative goodwill arising on an acquisition where the fair value of identifiable assets, liabilities and contingent liabilities exceeds the fair value of the consideration is credited and recognised in the consolidated income statement immediately.

b) Patents, trademarks and licences

Separately acquired patents, trademarks and licences are shown at historical cost. Patents, trademarks and licences acquired in a business combination are recognised at fair value at the acquisition date. Patents, trademarks and licences have a finite useful life and are carried at cost less accumulated amortisation.

Amortisation is calculated using the straight-line method to allocate the cost of the asset over the estimated useful lives of 10 to 15 years. Amortisation is charged to selling, general and administrative expenses in the income statement.

The carrying value of patents, trademarks and licences is reviewed for potential impairment if events or circumstances indicate a potential impairment. Any impairment identified is immediately charged to the Consolidated Income Statement.

2.5 Intangible assets

c) Development costs

Expenditure incurred that is directly attributable to the development of new or substantially improved products or processes is recognised as an intangible asset when the following criteria are met:

- the product or process is intended for use or sale;
- the development is technically feasible to complete;
- there is an ability to use or sell the product or process;
- it can be demonstrated how the product or process will generate probable future economic benefits;
- there are adequate technical, financial and other resources to complete the development; and
- the development expenditure can be reliably measured.

Directly attributable costs refer to the materials consumed, the directly attributable labour, and the directly attributable overheads incurred in the development activity. General operating costs, administration costs and selling costs do not form part of directly attributable costs.

All research and other development costs are expensed as incurred.

Capitalised development costs are amortised in line with the expected production volume profile over the period during which the economic benefits are expected to be received, which typically range between 3 and 8 years. The estimated remaining useful lives of development costs are reviewed at least on an annual basis. Amortisation commences once the project is completed and the development has been released into production. Amortisation is charged to selling and general administration expenses in the income statement.

The carrying value of capitalised development costs in respect of completed projects is reviewed for impairment if events or circumstances indicate a potential impairment. Projects that remain under development at the reporting date are reviewed for impairment at least annually or more frequently if events or circumstances indicate a potential impairment. Any impairment identified is immediately charged to the Consolidated Income Statement.

d) Software

Directly attributable costs incurred in the development of bespoke software for the Group's own use are capitalised and amortised on a straight-line basis over the expected useful life of the software, which typically range between 3 and 10 years. Amortisation is charged to selling and general administration expenses in the income statement.

The carrying value of capitalised software costs is reviewed for potential impairment if events or circumstances indicate a potential impairment. Any impairment identified is immediately charged to the Consolidated Income Statement. The costs of maintaining internally developed software and annual licence fees paid to utilise third party software are expensed as incurred.

e) Customer contracts recognised on acquisition

Customer contract intangible assets that form part of the identifiable net assets of an acquired business are recognised at their fair value and amortised on a systematic basis over their useful economic life, which is up to 7 years. Amortisation is charged to selling and general administration expenses in the income statement.

The fair value of customer contracts has been evaluated using the multi-period excess earnings method ('MEEM'). The MEEM model valuation was prior charged to the cost of product development and qualification to which the contract relates.

The carrying value of customer contract intangible assets is reviewed for potential impairment if events or circumstances indicate a potential impairment. Any impairment identified is immediately charged to the Consolidated Income Statement.

2.6 Property, plant and equipment

Property, plant and equipment is stated at cost less accumulated depreciation and any provision for impairment. Cost comprises all costs that are directly attributable to bringing the asset into working condition for its intended use. Depreciation is calculated to write down the cost of property, plant and equipment to its residual value on a straight-line basis over the following estimated useful economic lives:

Freehold buildings	15 to 25 years
Short leasehold improvements	5 to 27 years
Plant and machinery	5 to 15 years
Fixtures and fittings	3 to 5 years

No depreciation is provided on land or assets yet to be brought into use. Depreciation is charged to cost of sales and selling and general administration expenses in the income statement.

Costs incurred after initial recognition are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with them will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the income statement during the financial year in which they are incurred.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within profit/loss on disposal of property, plant and equipment in the income statement.

Assets' residual values and useful economic lives are reviewed, and adjusted if appropriate, at the end of each reporting period. The carrying value of property, plant and equipment is reviewed for potential impairment if events or circumstances indicate a potential impairment. Any impairment identified is immediately charged to the Consolidated Income Statement.

Notes to the financial statements continued

For the year ended 31 December 2021

2. Significant accounting policies continued

2.7 Leases

The Group assesses whether a contract is or contains a lease, at inception of the contract. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right of use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short term leases (defined as leases with a lease term of 12 months or less), leases of low value assets (such as small items of office furniture and equipment) and leases with variable rentals not linked to a relevant index (see note 3a). For these leases, the Group recognises the lease payments as an operating expense on a straight line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

Right of use assets and lease liabilities are recognised at the lease commencement date. Right of use assets are initially measured at cost, and subsequently measured at cost less any accumulated depreciation and impairment losses, adjusted for certain remeasurements of the lease liability.

Right of use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right of use asset reflects that the Group expects to exercise a purchase option, the related right of use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The Group applies IAS 36 to determine whether a right of use asset is impaired and accounts for any identified impairment loss as described in the 'Property, Plant and Equipment' policy.

Right of use assets are presented as a separate line in the consolidated statement of financial position.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right of use asset) when there is a change in future lease payments. Changes in future lease payments can arise from a change in an index or rate, a change in the assessment of whether a purchase or extension option is reasonably certain to be exercised or from a change in assessment about whether a termination option is reasonably certain not to be exercised.

The Group did not make any such adjustments during the current year.

Variable rents that do not depend on an index or rate are not included in the measurement of the lease liability and the right of use asset. The related payments are recognised as an expense in the period in which the event or condition that triggers those payments occurs and are included in the line "Cost of sales" in profit or loss (see note 3a).

2.8 Impairment of non-financial assets

Intangible assets that have an indefinite useful life or intangible assets not ready to use are not subject to amortisation and are reviewed for potential impairment at least annually or more frequently if events or circumstances indicate a potential impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value (less disposal costs) and value in use.

Value in use is based on the present value of the future cash flows relating to the asset, discounted at the Group's risk adjusted pre-tax discount rate. For the purpose of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows.

2.9 Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the first in first out method. Cost comprises direct materials and, where applicable, direct labour costs and attributable overheads that have been incurred in bringing the inventories to their present location and condition based on normal operating capacity. Net realisable value is the estimated selling price in the ordinary course of business, less applicable selling expenses.

2.10 Trade receivables

Trade receivables are the amounts due from customers for goods sold or services performed in the ordinary course of business. If collection is expected in one year or less (or in the normal operating cycle of the business if longer) they are classified as current assets. If not, they are presented as non-current assets.

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

2.11 Cash and cash equivalents

In the consolidated statement of cash flows, cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less and bank overdrafts. Bank overdrafts are presented within cash and cash equivalents where the Group has a right of set off under its treasury arrangements that are applied to its facilities.

2.12 Preference share debt instruments

Preference share financial assets are debt instruments due from an associate (see note 30). Debt instruments are initially recognised at fair value and subsequently measured at amortised cost as these financial assets are held with the objective of collecting the contractual cash flows and the contractual terms of the instrument give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.

2.13 Financial assets

Financial assets are recognised on the Group's balance sheet when the Group becomes a party to the contractual provisions of the financial instrument and are derecognised when the rights to receive cash flows have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

Classification of financial assets

On initial recognition, a financial asset is classified as measured at amortised cost, fair value through other comprehensive income – debt investment, fair value through other comprehensive income – equity investment or fair value through profit or loss.

The classification depends on the purpose for which the financial assets were acquired and the classification is determined at the date of initial recognition. Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the reporting period following the change in business model.

A financial asset is measured at amortised cost if it meets both of the following conditions:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Amortised cost financial assets are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after the reporting period where the item is classified as a non-current asset. The Group's financial assets comprise trade and other receivables (note 2.10), cash and cash equivalents (note 2.11), preference share debt instruments (note 2.12) and contract assets (note 2.22).

Amortised cost and effective interest method

Financial assets are measured at amortised cost using the effective interest method. The effective interest rate is the rate that discounts estimated future cash receipts excluding expected credit losses, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortised cost of a financial asset before adjusting for any loss allowance. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

Impairment of financial assets

The Group recognises a loss allowance for expected credit losses ('ECL') on trade receivables, contract assets and investments in debt instruments that are measured at amortised cost. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

Expected credit losses are measured as an allowance equal to 12-month ECL for stage 1 assets, or lifetime ECL for stage 2 or stage 3 assets. An asset moves to stage 2 when its credit risk has increased significantly since initial recognition. In circumstances where credit risk increases to the point that it becomes highly probable that the debt instrument will not become recoverable, the Group considers that this would represent a default event and moves to stage 3.

The Group recognises lifetime ECL for trade receivables and contract assets. The ECL on these financial assets are estimated based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, including observable data such as changes in arrears or economic conditions that provide an indication that a debtor is experiencing significant financial difficulty, default or delinquency in payment that correlate with defaults.

For preference share debt instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to twelve-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, twelve-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

Credit impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit impaired. A financial asset is 'credit impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery.

Significant increase in credit risk – Preference share debt instruments

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument at the reporting date with the risk of a default occurring on the financial instrument at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort. Forward-looking information considered includes the future prospects of the joint venture entity in which the Group holds its preference share debt instruments, obtained from the joint venture's financial forecasts and projections prepared by management of the joint venture entity, as well as consideration of various external sources of actual and forecast economic information that relate to the joint venture's core operations.

Financial Statements

2. Significant accounting policies continued

2.13 Financial assets

In particular, the following information is considered when assessing whether credit risk has increased significantly since initial recognition:

- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the joint venture's ability to redeem the preference share debt;
- existing or forecast adverse changes in the joint venture's business plan and financial projections indicating a significant extension to the period prior to redemption of the preference share debt;
- an actual or expected significant deterioration in the operating results of the joint venture;
- significant increases in credit risk on other financial assets of the joint venture; and
- an actual or expected significant adverse change in the regulatory, political or technological environment that results in a significant decrease in the joint venture's ability to redeem the preference share debt.

In the event that the credit risk assessment results in a probable delay in forecast repayment of the debt instrument compared to the original expectation the Group considers that this represents a significant increase in credit risk.

In circumstances where credit risk increases to the point that it becomes highly probable that the debt instrument will not become recoverable the Group considers that this would represent a default event.

Measurement and recognition of expected credit losses

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above. Exposure at default is represented by the gross carrying amount of the financial asset at the reporting date.

ECL for financial assets is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate.

If the Group has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the Group measures the loss allowance at an amount equal to 12-month ECL at the current reporting date.

The Group recognises an impairment gain or loss in profit or loss for financial assets with a corresponding adjustment to the carrying amount in the consolidated balance sheet.

2.14 Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs. Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

Financial liabilities

Financial liabilities are classified as measured at amortised cost or fair value through profit and loss. A financial liability is classified as fair value through profit and loss if it is classified as held for trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at fair value through profit and loss are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Other financial liabilities are measured at amortised cost using the effective interest method.

Financial liabilities are non-derivative financial liabilities with fixed or determinable payments and they are included in current liabilities, except for maturities greater than 12 months after the reporting period where they are classified as a non-current liability. The Group's financial liabilities comprise trade and other payables (note 2.15), borrowings (note 2.16) and lease liabilities (note 2.7) in the consolidated balance sheet.

2.15 Trade payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities. Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

2.16 Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost using the effective interest method.

2.17 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that take a substantial period of time to get ready for their intended use, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use. All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

2.18 Derivatives and hedging activities

Derivatives are initially recognised at fair value on the date a derivative contract is entered into, and they are subsequently remeasured to their fair value at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. The group designates certain derivatives as either:

- hedges of a particular risk associated with the cash flows of recognised assets and liabilities and highly probable forecast transactions (cash flow hedges), or
- hedges of a net investment in a foreign operation (net investment hedges).

Cash flow hedges and derivatives that qualify for hedge accounting

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in the cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, within other gains/(losses).

Cash flow hedges and derivatives that do not qualify for hedge accounting

Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognised immediately in profit or loss and are included in other gains/(losses).

Net investment hedges

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated in reserves in equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within other gains/(losses). Gains and losses accumulated in equity are reclassified to profit or loss when the foreign operation is partially disposed of or sold.

2.19 Government grants

Government grants are recognised at fair value when there is reasonable assurance that the Group has complied with the conditions attaching to them and the grants will be received. Grants related to purchase of assets are treated as deferred income and allocated to the income statement over the useful lives of the related assets while grants related to expenses are treated as other income in the income statement.

2.20 Share capital and other reserves

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new ordinary shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Other reserves relate to share-based payment transactions.

2.21 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated. Restructuring provisions comprise site closure costs and employee termination payments. Provisions are not recognised for future operating losses.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects the time value of money and the risks specific to the obligation.

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

2. Significant accounting policies continued

2.22 Revenue recognition

Revenue represents the transaction price specified in a contract with a customer for goods, services and intellectual property licenses provided in the ordinary course of business net of value added and other sales related taxes.

Standard Customer Products

Revenue is recognised when the goods are delivered and have been accepted by customers. For contracts that permit the customer to return an item, revenue is recognised to the extent that it is highly probable that a significant reversal in the amount of revenue recognised will not occur.

The amount of revenue recognised is adjusted for expected returns, which are estimated based on historical data for each specific type of product with a refund liability recognised as part of trade receivables. The Group reviews its estimate of expected returns at each reporting date and updates the amounts of any liability accordingly.

A receivable is recognised when the goods are delivered, since this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

Bespoke Customer Products

Revenue is recognised for bespoke customer products with no alternative use where the Group has a guaranteed contractual right to payment on an over time basis prior to the delivery of goods to the customers' premises. Revenue is recognised on an input basis by reference to the stage of completion of the manufacturing process, a process which includes an epitaxial wafer manufacture stage and a metrology and wafer test stage which are both typically completed within a limited number of days.

The amount of revenue recognised is adjusted for expected returns, which are estimated based on historical data for each specific type of product with a refund liability recognised as part of trade receivables. The Group reviews its estimate of expected returns at each reporting date and updates the amounts of any liability accordingly.

The Group operates supplier managed inventory arrangements for certain global customers where the Group is responsible for ensuring that contractually agreed levels of inventory are maintained at specified locations. The Group has a guaranteed contractual right to payment for the bespoke customer products manufactured under these arrangements with revenue recognised on an over time basis.

Intellectual Property Licenses

Intellectual property license income relates to the sale of finite and perpetual period licenses.

Revenue is recognised for intellectual property licenses with a right to use over a finite period when control of the license is transferred to the customer in accordance with the terms of the relevant licensing agreement and collection of the resulting receivable is reasonably assured.

Revenue is recognised for perpetual intellectual property licenses with a right to use when a signed agreement or other persuasive evidence of an arrangement exists, the intellectual property has been delivered, the license fee is fixed or determinable and collection of the resulting receivable is reasonably assured.

2.23 Segmental reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the Executive Directors, who oversee the allocation of resources and the assessment of operating segment performance.

2.24 Finance income and finance costs

The Group's finance income and finance costs include interest income and interest expense.

Interest income or expense is recognised using the effective interest method. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to the gross carrying amount of the financial asset or the amortised cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset.

2.25 Pension costs

The Group operates defined contribution pension schemes. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. Contributions are charged in the Consolidated Income Statement as they become payable in accordance with the rules of the scheme. The Group has no further obligations once the contributions have been made.

2.26 Share based payments

The Group operates a number of equity settled share based compensation plans under which the Group receives services from employees as consideration for equity instruments in IQE plc. The fair value of the employee services received in exchange for the grant of the options is recognised as an expense in the consolidated income statement and as a credit in other reserves in the consolidated statement of changes in equity except for the social security element of the award which is treated as cash settled with the liability recognised in other taxation and social security within trade and other payables in the consolidated balance sheet. The total amount to be expensed is determined by reference to the fair value of the options granted including any market performance conditions (for example, an entity's share price), excluding the impact of any service and non market performance vesting conditions (for example, profitability, sales growth targets and remaining an employee of the entity over a specified time period) and including the impact of any non vesting conditions (for example, the requirement for employees to save or hold shares for a specific period of time).

Non market performance and service conditions are included in assumptions about the number of options that are expected to vest. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each reporting period, the Group revises its estimates of the number of options that are expected to vest based on the non market vesting conditions. It recognises the impact of the revision to original estimates, if any, in the consolidated income statement, with a corresponding adjustment to equity.

When the options are exercised, the company issues new shares. The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and the balance to share premium. In the company's own financial statements, the grant of share options to the employees of subsidiary undertakings is treated as a capital contribution. Specifically, the fair value of employee services received (measured at the date of grant) is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity in the parent entity financial statements.

The social security contributions payable in connection with the grant of the share options is considered an integral part of the grant itself, and the charge will be treated as a cash settled transaction.

2.27 Foreign currency

Items included in the financial statements of each subsidiary are measured using the currency of the primary economic environment in which the subsidiary operates ("the functional currency"). The consolidated financial statements are presented in sterling, which is the Group's presentational currency.

Foreign currency transactions are translated into the subsidiaries functional currency at the rates of exchange ruling at the date of the transaction, or at the forward currency hedged rate where appropriate. Monetary assets and liabilities in foreign currencies are translated into the subsidiaries functional currency at the rates ruling at the balance sheet date. All exchange differences are taken to the income statement.

The balance sheets of overseas subsidiaries are translated into sterling at the closing rates of exchange at the balance sheet date whilst the income statements are translated into sterling at the average rate for the period. The resulting translation differences are taken directly to reserves.

Foreign exchange gains and losses on the retranslation of foreign currency borrowings that are used to finance overseas operations are accounted for on the 'net investment' basis and are recorded directly in reserves, provided that the hedge is effective.

2.28 Current and deferred tax

Income tax for the year comprises current and deferred tax. Tax is recognised in the income statement, except to the extent that it relates to items recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year using rates substantially enacted at the balance sheet date, and any adjustments to tax payable in respect of prior years.

Amounts receivable from tax authorities in relation to research and development tax relief under the RDEC scheme are recognised within operating profit in the period in which the research and development costs are treated as an expense. Where amounts are outstanding at the year end and have not been formally agreed, an appropriate estimate of the amount is included within other receivables.

Deferred tax is provided in full on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the amounts used for taxation purposes. Deferred tax is calculated at the tax rates that have been enacted or substantially enacted at the balance sheet date.

Deferred tax assets are only recognised to the extent that it is probable that future taxable profits will be available against which deductible temporary differences can be utilised. Deferred tax liabilities are recognised for taxable temporary differences, unless specifically exempt. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current taxation assets against current taxation liabilities and it is the intention to settle these on a net basis.

2.29 Investment in subsidiaries

Investments in subsidiaries are held at cost of investment less provision for impairment in the parent company financial statements.

2.30 Other equity investments

Other equity investments are held at cost less provision for impairment in both the parent company and Group financial statements on the basis that the Group (and Company) does not have the ability to exert significant influence or control over the strategic and operating activities of the other equity investments.

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

2. Significant accounting policies continued

2.31 Alternative performance measures

Income Statement

Alternative income statement performance measures are disclosed separately in the financial statements after a number of adjusted non-cash items, non-operational items and significant infrequent items that would distort period on period comparability where it is deemed necessary by the Directors to do so to provide further understanding of the financial performance of the Group. Adjusted items are material items of income or expense that have been shown separately due to the significance of their nature or amount. The tax impact of adjusted items is calculated applying the relevant enacted tax rate for each adjusted item. Details of the adjusted items are included in note 5.

Balance Sheet

Alternative balance sheet performance measures for net debt are disclosed separately in the financial statements after adjustments to exclude lease liabilities where it is deemed necessary by the Directors to do so to provide further understanding of the financial position, gearing and liquidity of the Group.

Cashflow Statement

Alternative cash flow statement performance measures are disclosed separately in the financial statements that reflect the cash impact of adjusted items included in alternative income statement performance measures. Adjusted items are material items of income or expense that have been shown separately due to the significance of their nature or amount. Details of the adjusted items are included in note 5.

3. Critical accounting judgements and key sources of estimation uncertainty

The Group's principal accounting policies are described in note 2. The application of these policies necessitates the use of estimates and judgements in a number of areas. Accordingly, the actual amounts may differ from these estimates. The main areas involving significant judgement and estimation are set out below.

(a) Critical accounting judgements in applying the Group's accounting policies

Joint Venture – Evaluation of rights, levels of control and influence

The determination of the level of influence or control that the Group has over a business is a mix of contractually defined and subjective factors that can be critical to the appropriate accounting treatment of an entity in the Group's consolidated financial statements. Control or influence is achieved through Board representation and by obtaining rights of veto over significant decisions relevant to the activities of the entity.

Compound Semiconductor Centre Limited ('CSC')

On 9 July 2015 the Group entered into a joint venture agreement with Cardiff University to create the CSC in the United Kingdom. The commercial purpose of the CSC is the research, development and manufacture of advanced compound semiconductor materials by metalorganic vapour phase epitaxy ('MOVPE').

The manufacturing and technical capability of the CSC was established with the Group contributing fixed assets, transferring employees including the current Managing Director of the CSC and licensing intellectual property with Cardiff University contributing cash. The Group also entered into an agreement with CSC that conveyed to the Group the right to use the CSC's assets, establishing the Group as the CSC's cornerstone customer during the early stages of the development of the CSC's business (see note 30).

The Shareholder Agreement establishes that the CSC is jointly controlled by the shareholders; key decisions, defined as part of contractually agreed Board reserved matters, require approval from directors representing each joint venture partner who have equal Board representation and voting rights.

The Group does not control the CSC such that its 50% equity investment in the joint venture is accounted for using the equity method in accordance with the accounting policies set out in note 2.

Joint Venture – Right of use asset

The Group established CSC with its joint venture partner as a centre of excellence for the development and commercialisation of advanced compound semiconductor wafer products.

On establishment of the joint venture, the Group contributed assets as part of its initial investment and entered into an agreement with the joint venture that has been extended in the current year and conveys to the Group the right to use the assets of the joint venture for a minimum period up to 31 March 2023. This agreement, which contains rights attaching to the use of the joint venture's assets, meets the definition of a lease. In the Group's judgement, due to the variable nature of the lease payments which are directly linked to the actual usage of the assets, the lease payments continue to be excluded from the measurement of right of use asset and lease liabilities with the variable lease costs recognised in operating expenses in the income statement as incurred.

Joint Venture – Classification of preference share debt

The Group classifies its preference share financial asset due from the CSC as debt [illegible] rather than treating the preference shares as part of the Group's investment in the CSC. This is on the basis that these preference shares [illegible] contingent on the generation of cash by CSC [illegible] equity.

Preference share funding was provided to the CSC by the joint venture partners to accelerate the development and growth of the CSC's business. The contractual arrangements between the joint venture partners and the CSC require that surplus cash generated by the CSC is used to redeem the preference share funding provided by the joint venture partners as envisaged in the CSC business plan and detailed in the original joint venture Shareholder Agreement.

Upon transition to IFRS 9 the Group assessed that this financial asset meets the requirements to be measured at amortised cost in line with the treatment previously adopted under IAS 39. The instrument is held with an objective to collect the contractual cash flows. These cash flows [illegible] of principal and interest on the principal amount outstanding.

(a) Critical accounting judgements in applying the Group's accounting policies

Joint Ventures – Credit risk associated with preference share debt

As explained in note 2.13, expected credit losses are measured as an allowance equal to 12-month ECL for stage 1 assets, or lifetime ECL for stage 2 or stage 3 assets. The Group has assessed, based on its joint venture's latest forecast, that recovery of the preference share debt within a reasonable period remains unlikely such that the credit risk remains at a level where the definition of default has been met and the asset continues to be classified at stage 3. In making this assessment, qualitative and quantitative reasonable and supportable forward looking information associated with the forecast future financial performance and cash generation of CSC has been used (see note 3.6 for details of the calculation of the loss allowance and the associated impairment of the financial asset).

Intangible assets – Technology development costs and patents

a) CREO™ filter technology assets
The Group has cREO™ filter technology related development cost and patent assets totalling £4,692,000 where the Group has taken the decision to pause the development and commercialisation of the associated technology.

IQE's MO, the technology developed for high performance bulk acoustic wave ('BAW') RF filters uses the Group's cREO™ technology platform and is capable of delivering improved BAW filter performance, particularly at higher frequency ranges used within 5G applications. Although the developed technology has a number of potential performance advantages when compared to incumbent technology the level of customer and partner engagement that is required to refine the technology for high end BAW filters has declined in the current year, a position that has led to the decision in 2021 to significantly scale back the development and commercialisation of the technology given the lack of a clear near term route to the delivery of commercial volumes and cash flows.

The current lack of visibility on the timeline to commercialise the technology and the decision to pause development and commercialisation activities has resulted in a non-cash intangible asset charge of £4,692,000 that has been charged to 'selling, general and administrative expenses' in the consolidated income statement following the write down of the development costs and patent assets to £nil.

b) Photonic quasi crystal technology assets
The Group has photonic quasi crystal technology related development cost and patent assets totalling £2,716,000 where the Group has taken the decision to pause the development and commercialisation of the associated technology.

Photonic quasi crystal technology provides the possibility to create on wafer optics for advanced sensing applications using the Group's Nano imprint lithography technology. Although Photonic quasi crystal technology has a number of potential advanced sensing applications the level of customer and partner engagement that is required to develop the technology has remained low, a position that has led to the decision in 2021 to significantly scale back the development and commercialisation of the technology given the lack of a clear near term route to the delivery of commercial volumes and cash flows.

The current lack of visibility on the timeline to commercialise the technology and the decision to pause development and commercialisation activities has resulted in a non-cash intangible asset charge of £2,716,000 that has been charged to 'selling, general and administrative expenses' in the consolidated income statement following the write down of development costs and patent assets to £nil.

Intangible assets – Technology development assets not yet available for use

Intangible assets include development cost assets not yet available for use of £3,046,000 (2020: £8,157,000) which have been reviewed for impairment as at the reporting date.

The Group is committed to the technical completion and commercialisation of each of its technology development assets which are governed and controlled by reference to a combination of technical development objectives and market and customer related commercial plans. The recoverable amount of each technology development project is determined based on value in use calculations using cash flow projections in line with the expected useful economic life of each asset. The value in use calculations are based on management approved risk adjusted cash flow forecasts for each project and comprise assumptions that include cost to complete forecasts for each technology development and commercial forecasts relating to the level of market penetration, revenue and cost of production for each technology.

Adjustments to profit

Alternative performance measures are disclosed separately in the financial statements after a number of adjusted exceptional, non-cash, non-operational or significant and infrequent items that would distort period on period comparability where it is deemed necessary by the Directors to do so to provide further understanding of the financial performance of the Group. Details of the adjusted items are included in note 5.

Notes to the financial statements continued

For the year ended 31 December 2021

3. Critical accounting judgements and key sources of estimation uncertainty continued

(b) Critical accounting estimates and key sources of estimation uncertainty

3.1 Goodwill impairment testing

Wireless

Following the assessment of the goodwill allocated to the Wireless cash generating unit ('CGU') to which goodwill of £57,173,000 (2020: £56,701,000) is allocated, the directors consider the recoverable amount of goodwill allocated to the Wireless CGU to be sensitive to the achievement of the Group's five year internal forecasts. The five year forecasts comprise forecasts of revenue, materials costs and site manufacturing labour and overhead costs based on current and anticipated market conditions that have been considered and approved by the Board. Whilst the Group is able to manage most of its Wireless CGU costs, significant elements of the Wireless revenue forecasts are inherently linked to global demand for smartphones and the adoption of 5G technology where uncertainty about both the timing and level of growth remains such that the revenue growth rates used within the forecasts are a key sensitivity given current consumer, market and regulatory dynamics.

The sensitivity analysis in respect of the recoverable amount of 'Wireless' goodwill is presented in note 13.

Photonics

Following the assessment of the goodwill allocated to the Photonics cash generating unit ('CGU'), to which goodwill of £7,124,000 (2020: £7,028,000) is allocated, the directors consider the recoverable amount of goodwill allocated to the Photonics CGU to be sensitive to the achievement of the Group's five year internal forecasts. The five year forecasts comprise forecasts of revenue, materials costs and site manufacturing labour and overhead costs based on current and anticipated market conditions that have been considered and approved by the Board. Whilst the Group is able to manage most of its Photonics CGU costs, significant elements of the Photonics revenue forecasts are inherently linked to global demand for smartphones, the acceleration of VCSEL technology to advanced sensing applications beyond existing 3D sensing, the adoption of high definition infrared imaging and sensing in health monitoring and environmental applications and the adoption of 5G technology for telecommunication and data communications where uncertainty about both the timing and level of growth remains such that the revenue growth rates used within the forecasts are a key sensitivity given current consumer, market and regulatory dynamics.

The sensitivity analysis in respect of the recoverable amount of 'Wireless' goodwill is presented in note 13.

3.2 Useful economic lives of development cost intangible assets

The periods of amortisation used for product and process development cost assets require estimates to be made on the estimated useful economic lives of the intangible assets to determine an appropriate rate of amortisation. Capitalised development costs are amortised in line with the expected production volume profile of the products to which they relate over the period during which economic benefits are expected to be received which is typically between 3 – 5 years.

The carrying value of development cost intangible assets is £27,341,000 (2020: £35,806,000). The amortisation charge for development cost intangible assets in the current year is £6,490,000 (2020: £6,430,000). If useful economic lives of development cost intangible assets were reduced by 1 year across the whole portfolio of assets the impact on current year amortisation would be to increase the charge by £1,189,000 (2020: £1,063,000) to £7,679,000 (2020: £7,493,000).

3.3 Valuation of lease liabilities and right of use assets

The application of IFRS 16 requires the Group to make judgements and estimates that affect the valuation of the lease liabilities and the valuation of right of use assets. These include: determining the contracts in scope of IFRS 16, determining the contract term and determining the interest rate used for discounting of future cash flows.

The lease term determined by the Group generally comprises the non-cancellable period of lease contracts, periods covered by an option to extend the lease if the Group is reasonably certain to exercise that option and periods covered by an option to terminate the lease if the Group is reasonably certain not to exercise that option.

Exercise of extension options in relation to existing in the Group's property leases are assumed to be reasonably certain except for the Group's Newport facility where it has been assumed that it is reasonably certain that the Group will exercise its buy out option at the end of the initial lease term. The same term as used for the length of the lease contract has been applied to the useful economic life of right of use assets.

The present value of the lease payments due to lessors in the Group's portfolio of property and plant leases has been determined using a discount rate that reflects the Group's incremental rate of borrowing, assessed as 2.25% – 2.65% depending on the lease characteristics.

If the incremental rate of borrowing was decreased by 0.20% the impact would be to increase the lease liability by £216,000 (2020: £227,000).

3.4 Deferred tax assets

Deferred tax assets are only recognised to the extent that it is probable that future taxable profits will be available against which deductible temporary differences can be utilised. This necessitates an assessment of future trading forecasts, capital expenditure and the utilisation of tax losses for each relevant tax jurisdiction where the Group operates.

Deferred tax assets are recognised for tax losses carried forward to the extent that the realisation of the related tax benefit through future taxable profits from the same trade is probable. The Group assesses future forecast taxable profit as probable by reference to its five year plan using underlying cash flow forecasts based on those used in the Group's goodwill impairment review. Any potential deferred tax asset assessed by reference to the level of future forecast taxable profit over this five year period has, in the current year, been restricted to the extent of taxable temporary differences due to the Group's current financial performance and recent history of taxable losses in its UK, US and Singapore operations.

The Group did not recognise deferred income tax assets of £31,260,000 (2020: £17,767,000) in respect of losses amounting to £134,808,000 (2020: £78,164,000) that can be carried forward against future taxable income. The deferred tax asset can be recognised if sufficient profits from the same trade arise in future periods.

3.5 Share based payments

Share based payment charges associated with long term incentive plans are calculated taking account of an assessment of the achievability of relevant performance conditions. The share based payment charge for long term incentive awards would be £365,000 (2020: £1,032,000) greater in 2021 if it was assumed that all performance criteria for existing awards would be met.

3.6 Preference share debt – Calculation of loss allowance

The Group classifies its preference share financial assets due from its joint venture, CSC, as debt instruments.

The carrying value of the Group's preference share debt is £nil (2020: £nil) after the recognition of expected credit losses and the application of the loss absorption requirements of IAS 28.38 (see note 3.9).

Expected credit loss impairment continues to be assessed at £7,922,000 (2020: £7,922,000).

When measuring expected credit loss on the preference share debt due from CSC the Group uses reasonable and supportable forward looking information, which is primarily based on assumptions about forecast future financial performance of CSC. The ECL model calculation is based on three key inputs: exposure at default, loss given default, and probability of default. Exposure at default is the carrying amount of the preference share debt.

Loss given default is an estimate of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the Group expect to receive, considering cash flows from any collateral.

Probability of default is an estimate of the likelihood of default over a given time horizon, the calculation of which includes historical data, assumptions and expectations of the future financial performance of CSC.

Default events and associated probability of default is assessed by reference to a range of scenarios based principally on assumptions and expectations of the future financial performance of CSC that have been derived from CSC's Board approved 2022 Budget extrapolated over the repayment period using a long term growth rate of 2%.

Following a review of a combination of factors, including CSC's progress and achievement against its business objectives, current cash flow forecasts for CSC and the capacity of CSC to redeem the debt, the Group has assessed that a position of default continues to exist on this instrument (see note 3(a)) and as a result, lifetime ECL continues to be calculated.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of the debt instrument and is the difference between the contractual cash flows due and those that the Group expect to receive, considering cash flows from any collateral.

The result of this assessment is that the Group considers the ECL to equal the carrying amount of the instrument and therefore the financial asset remains fully impaired.

3.7 Preference share debt – Long term interest

The Group treats its preference share financial assets due from its joint venture, CSC, as a long term interest in an equity accounted investee on the basis that the factors that have led to the recognition of an expected credit loss impairment (note 3.6) indicate that repayment of the preference share debt is no longer expected in the foreseeable future.

As a long term interest in an equity accounted investee, the group has applied the loss absorption requirement in IAS 28.38 to the carrying amount of the preference share financial asset after the application of the expected credit loss described in note 3.6. Application of the loss absorption requirements after taking account of expected credit losses continue to result in a position where the Group recognises no further allocation of joint venture losses to the preference share financial asset as the carrying value of the preference share debt is £nil (2020: £nil) after recognition of expected credit losses.

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

4. Segmental analysis

4.1 Description of segments and principal activities

The Chief Operating Decision Maker is defined as the Executive Management Board. The Executive Management Board, consisting of the Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, Chief Technology Officer, Executive VP Global Business Development, Wireless and Emerging Products, Executive VP Global Business Development, Photonics & Infrared and the Global Human Resources Director considers the group's performance from a product perspective and have identified three primary reportable segments:

- Wireless – this part of the business manufactures and sells compound semiconductor materials for the wireless market which includes radio frequency devices that enable wireless communications
- Photonics – this part of the business manufactures and sells compound semiconductor materials for the photonics market which includes applications that either transmit or sense light, both visible and infrared
- CMOSS++ – this part of the business manufactures and sells advanced semiconductor materials related to silicon which include the combination of the advanced properties of compound semiconductors with those of lower cost of silicon technologies

The Executive Management Board primarily use revenue and a measure of adjusted operating profit to assess the performance of the operating segments. Measures of total assets and liabilities for each reportable segment are not reported to the Executive Management Board and therefore have not been disclosed.

4.2 Revenue – Disaggregation of segmental revenue from contracts with customers

The group derives revenue from the transfer of goods, services and intellectual property over time and at a point in time. Revenues from external customers derive from the sale of standard or bespoke compound semiconductor materials or from the sale or licensing of intellectual property.

Disaggregate Segment Revenue	Wireless 2021 £'000	Photonics 2021 £'000	CMOSS++ 2021 £'000	Total 2021 £'000
Timing of revenue recognition				
At a point in time				
Standard customer products		11,760		11,760
Intellectual property licenses				
Over time				
Bespoke customer products	83,217	56,307	2,812	142,336
Total revenue	**83,217**	**68,067**	**2,812**	**154,096**

Disaggregate Segment Revenue	Wireless 2020 £'000	Photonics 2020 £'000	CMOSS++ 2020 £'000	Total 2020 £'000
Timing of revenue recognition				
At a point in time				
Standard customer products		14,088		14,088
Intellectual property licenses				
Over time				
Bespoke customer products	94,193	67,539	2,196	163,928
Total revenue	**94,193**	**81,627**	**2,196**	**178,016**

Included within bespoke customer product revenue is revenue of £63,725,000 (2020: £89,900,000) that relates to supplier managed inventory arrangements where billing occurs from the earlier of a specified contractual backstop date following delivery or when the product is drawn from inventory by the customer.

Revenues of approximately £54,924,000 (2020: £89,900,000) are derived from two customers (2020: three) who each account for greater than 10% of the Group's total revenues.

Customer	Segment	2021 £'000	2021 % revenue	2020 £'000	2020 % revenue
Customer 1	Wireless	34,946	23%	29,608	17%
Customer 2	Wireless	8,801	6%	31,701	18%
Customer 3	Photonics	19,978	13%	28,591	16%

There are no customers in the CMOSS++ segment that account for greater than 10% of the Group's total revenue.

4.3 Adjusted Operating Profit

Adjusted operating profit excludes the effects of significant non cash, non operational or significant and infrequent items of income and expenditure which may have an impact on the quality of earnings such as restructuring costs, legal expenses and impairments where the impairment is the result of an isolated, non recurring event. Adjusted operating profit also excludes the effects of equity settled share based payments.

Finance costs are not allocated to segments because treasury and the cash position of the group is managed centrally.

Revenue	**2021 £'000**	**2020 £'000**
Wireless	83,217	94,193
Photonics	68,067	81,627
CMOS++	2,812	2,196
Revenue	**154,096**	**178,016**
Adjusted operating (loss)/profit		
Wireless	7,305	11,393
Photonics	1,737	9,080
CMOS++	(586)	(714)
Central corporate costs	(11,910)	(14,373)
Adjusted operating (loss)/profit	**(6,454)**	**5,386**
Adjusted items (see note 5)	(13,524)	(10,903)
Operating loss	**(19,978)**	**(5,517)**
Reversal of share of losses of joint venture accounted for using the equity method		3,788
Finance costs	(2,213)	(2,165)
Loss before tax	**(22,191)**	**(3,894)**

Notes to the financial statements continued

For the year ended 31 December 2021

4. Segmental analysis continued

4.4 Geographical information

Revenue by location of customer

	2021 £'000	2020 £'000
Americas	**99,842**	**118,298**
United States of America	99,817	118,251
Rest of Americas	25	47
Europe, Middle East & Africa (EMEA)	**13,476**	**15,250**
France	2,166	2,291
Germany	3,893	6,056
Israel	1,598	2,131
United Kingdom	3,643	2,850
Rest of EMEA	2,176	1,922
Asia Pacific	**40,778**	**44,468**
People's Republic of China	10,311	6,517
Japan	7,217	3,679
Taiwan	21,247	28,348
Rest of Asia Pacific	2,003	5,924
Total revenue	**154,096**	**178,016**

Non-current assets by location

	Property, plant and equipment		Intangible assets		Right of use assets	
	2021 £'000	2020 £'000	2021 £'000	2020 £'000	2021 £'000	2020 £'000
USA	40,824	42,386	66,177	71,010	10,071	4,998
Singapore	6,283	6,811	9,623	9,801		
Taiwan	31,188	21,943	4,268	5,900	826	268
UK	51,435	55,089	15,798	19,061	33,370	32,073
	129,730	**126,229**	**95,866**	**105,772**	**44,267**	**37,339**

5. Adjusted profit measures

The Group's results report certain financial measures after a number of adjusted items that are not defined or recognised under IFRS including adjusted operating profit, adjusted profit before income tax and adjusted earnings per share. The Directors believe that the adjusted profit measures provide a useful comparison of business trends and performance and allow management and other stakeholders to better compare the performance of the Group between the current and prior year, excluding the effects of certain non cash charges, non operational items and significant infrequent items that would distort period on period comparability. The Group uses these adjusted profit measures for internal planning, budgeting, reporting and assessment of the performance of the business.

The tables below show the adjustments made to arrive at the adjusted profit measures and the impact on the Group's reported financial performance.

	Adjusted Results £'000	Adjusted Items £'000	2021 Reported Results £'000	Adjusted Results £'000	Adjusted Items £'000	2020 Reported Results £'000
Revenue	**154,096**	**–**	**154,096**	**178,016**	**–**	**178,016**
Cost of sales	(135,325)	(1,127)	(136,452)	(144,689)	(177)	(144,866)
Gross profit	**18,771**	**(1,127)**	**17,644**	**33,327**	**(177)**	**33,150**
SG&A	(25,302)	(12,397)	(37,699)	(27,759)	(6,938)	(34,697)
Impairment loss on financial assets					(3,788)	(3,788)
Profit on disposal of PPE	77		77	(182)		(182)
Operating (loss)/profit	**(6,454)**	**(13,524)**	**(19,978)**	**5,386**	**(10,903)**	**(5,517)**
Reversal of JV losses				–	3,788	3,788
Finance costs	(2,213)		(2,213)	(2,165)		(2,165)
(Loss)/profit before tax	**(8,667)**	**(13,524)**	**(22,191)**	**3,221**	**(7,115)**	**(3,894)**
Taxation	(10,614)	1,803	(8,811)	(519)	1,520	1,001
(Loss)/profit for the period	**(19,281)**	**(11,721)**	**(31,002)**	**2,702**	**(5,595)**	**(2,893)**

	Pre-tax Adjustment £'000	Tax Impact £'000	2021 Adjusted Results £'000	Pre-tax Adjustment £'000	Tax Impact £'000	2020 Adjusted Results £'000
Share based payments	(1,691)	(13)	**(1,704)**	(265)	210	**(55)**
Chief Executive Officer Recruitment	(741)		**(741)**	–		**–**
Restructuring	(3,681)		**(3,681)**	(162)	39	**(123)**
Impairment – intangibles	(7,411)	1,816	**(5,595)**	(6,507)	1,212	**(5,295)**
Onerous contract			**–**	(1,840)	350	**(1,490)**
Patent dispute legal fees			**–**	1,689	(321)	**1,368**
Impairment – financial assets			**–**	(3,788)		**(3,788)**
Share of JV losses – financial asset			**–**	3,788		**3,788**
Total	**(13,524)**	**1,803**	**(11,721)**	**(7,115)**	**1,520**	**(5,595)**

The nature of the adjusted items is as follows:

- Share based payments – The charge (2020: charge) relates to share based payments recorded in accordance with IFRS 2 'Share based payment' of which £1,127,000 (2020: £177,000) has been classified within cost of sales in gross profit and £564,000 (2020: £88,000) has been classified as selling, general and administrative expenses in operating profit. £46,000 cash has been defrayed in the year (2020: £nil) in respect of employer social security contributions following the exercise of unapproved employee share options.
- Chief Executive Officer recruitment – The charge of £741,000 include settlement costs and legal fees of £319,000 associated with the transition of the former Chief Executive Officer to a non-executive role and external recruitment fees of £422,000. Cash costs defrayed in the year total £152,000 (2020: £nil).
- Restructuring – The charge of £3,681,000 relates to restructuring costs relating to the announced closure of the Group's manufacturing facility in Pennsylvania, USA and the Group's manufacturing facility in Singapore.
  - Restructuring charges of £661,000 (2020: £162,000) relate to employee related costs relating to the announced closure of the Group's manufacturing facility in Pennsylvania, USA. The charge was classified as selling, general and administrative expenses within operating loss. Cash costs defrayed in the year total £342,000 (2020: £nil).
  - Restructuring charges of £3,020,000 (2020: £nil) consist of employee related costs of £1,540,000 (2020: £nil) and site decommissioning costs of £1,480,000 (2020: £nil) relating to the announced closure of the Group's manufacturing facility in Singapore. The charge was classified as selling, general and administrative expenses within operating loss. Cash costs defrayed in the year total £nil (2020: £nil).

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

5. Adjusted profit measures continued

- Impairment of intangibles – The non cash charge of £7,411,000 (2020: £6,537,000) relates to the impairment of certain technology development costs and intellectual property patent assets.
  - The non cash impairment charge of £7,411,000 relates to the impairment of cREO™ filter technology development costs and patent assets totalling £4,692,000 and the impairment of Photonic quasi crystal technology related development costs and patent assets totalling £2,716,000 where the Group has taken the decision to pause development related activities given the current lack of visibility over the timeline to commercialisation of each of the technologies.
  - The prior period non cash impairment charge of £6,537,000 relates to the Group's non filter related cREO™ patent and development costs and arose from a lack of intent to continue relevant development activities following the refocus of resource and investment into cREO™ filter related development activities.
- Onerous contract – The prior period onerous contract provision of £1,840,000 represents the cost of minimum guaranteed future royalty payments associated with the use of cREO™ technology acquired from Translucent Inc.
- Patent dispute legal costs – The prior period credit related to a settlement agreement of £1,825,000 (US$2,500,000) associated with legal costs incurred by the Group that was negotiated with the plaintiff following an arbitration panel ruling in favour of the Group on 17 January 2020. The settlement net of final legal costs of £49,000 has been cash received in 2021. The prior period credit also included an increase in insurance income of £410,000 following final settlement with the Group's insurers partially offset by legal costs incurred during the prior year of £546,000. Insurance income of £410,000 and legal costs of £546,000 were cash received and cash paid in the prior year.
- Impairment of financial asset – The prior period non cash charge of £3,788,000 (2020: £4,134,000) related to the increase in the expected credit loss associated with the Group's preference share financial asset due from its joint venture, CSC.
- Reversal share of joint venture losses (financial asset) – The Group treats its preference share financial assets due from its joint venture, CSC, as a long term interest in an equity accounted investee and is required to apply the loss absorption requirements of IAS 28.38 to the carrying amount of the preference share financial asset, after the application of any expected credit losses as described above. Application of the loss absorption requirements following the increase in expected credit losses in the prior year resulted in the reversal of the Group's share of joint venture losses previously allocated to the preference share financial asset which resulted in a non cash credit of £3,788,000 in the prior year.

The cash impact of adjusted items in the consolidated cash flow statement represents cash received in respect of the patent dispute settlement net of final legal costs, onerous contract royalty payments associated with the Group's cREO™ technology, payment of employee related costs associated with the announced closure of the Group's site in Pennsylvania, national insurance paid in respect of employee share option exercises and payment of certain costs related to recruitment of the group's new Chief Executive Officer totalling £943,000 (2020: exceptional cash costs: £867,000).

Adjusted EBITDA (adjusted earnings before interest, tax, depreciation and amortisation) is calculated as follows:

	2021 £'000	2020 £'000
Loss attributable to equity shareholders	**(31,002)**	**(3,271)**
Non controlling interest		378
Finance costs	2,213	2,165
Tax	8,811	(1,001)
Depreciation of property, plant and equipment	13,309	12,983
Depreciation of right of use assets	3,854	3,681
Amortisation of intangible fixed assets	8,047	7,869
Loss (profit) on disposal of PPE	(77)	182
Adjusted items	13,524	7,115
Share based payments	1,691	265
Chief Executive Officer Recruitment	741	
Restructuring	3,681	162
Impairment of intangibles	7,411	6,537
Patent dispute settlement and legal costs		(1,689)
Onerous contract provision		1,840
Impairment of financial asset		3,788
Share of joint venture losses (financial asset)		(3,788)
Adjusted EBITDA	**18,679**	**30,101**
Share based payments	(1,691)	(265)
Chief Executive Officer Recruitment	(741)	
Restructuring	(3,681)	(162)
Patent dispute settlement and legal costs		1,689
Onerous contract provision		(1,840)
Impairment of financial asset		(3,788)
Share of joint venture losses (financial asset)		3,788
EBITDA	**12,566**	**29,523**

6. Operating loss

	2021 £'000	2020 £'000
The operating loss is stated after charging/(crediting):		
Depreciation of property, plant and equipment	13,309	12,983
Depreciation of right of use assets	3,854	3,681
Amortisation of intangible assets	8,047	7,869
Impairment of intangible assets	7,411	6,537
Impairment of non current financial assets		3,788
Services provided by auditors	382	434
Expenses relating to variable lease payments not included in the measurement of the lease liability	6,234	6,365
Research and development	1,968	897
Exchange losses/(gains)	2,378	961
Share based payments	1,691	265
Cost of raw materials consumed	59,166	72,857
(Profit)/loss on disposal of fixed assets	(77)	182
Adjusted items	4,422	313

'Expenses relating to variable lease payments not included in the measurement of the lease liability principally relate to the variable cash costs of production based on usage that are payable to the Group's joint venture, CSC, associated with the Group's right of use of the joint venture's assets (note 3 and 32)

	2021 £'000	2020 £'000
Services provided by auditors		
Fees payable to the company's auditor and its associates for the audit of the parent company and consolidated financial statements	335	198
Fees payable to the company's auditor and its associates for other services:		
• Audit of the company's subsidiaries	27	27
• Audit related assurance services	20	20
• Tax compliance and other advisory services		189
Total KPMG LLP (group auditors)	**382**	**434**

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

7. Employee costs

	2021 £'000	2020 £'000
Employee costs (including directors' remuneration)		
Wages and salaries	37,743	37,193
Social security costs	3,279	3,207
Other pension costs	1,801	1,833
Share based payments	1,691	265
	44,514	**42,498**

	2021 Number	2020 Number
Average number of employees (including directors)		
Manufacturing	546	536
Selling, general and administrative	134	122
	680	**658**

Directors' emoluments, share options and other long term incentive plan details, including details of all outstanding options and long term incentive awards and the value of director pension contributions paid are set out in the Remuneration Report where the relevant disclosures have been highlighted as audited. Audited tables include 'Single total figure of remuneration for Executive Directors' on page 67, 'Scheme interest awarded in 2021', 'Exit payments made in the year', 'Single total figure of remuneration for Non-Executive Directors' on page 69 and 'Share Options'' on page 71.

Key management within the Group comprises members of the Executive Management Board and Non Executive Directors. Compensation to key management in 2021 totalled £2,404,031 (2020: £3,574,000), consisting of emoluments and other benefits in kind of £2,315,815 (2020: £3,507,000) and pension contributions of £88,216 (2020: £67,000). The charge for share based payment awards to key management totalled £705,681 (2020: £316,018).

8. Finance (costs)/income

	2021 £'000	2020 £'000
Bank and other loans	(905)	(949)
Interest expense on lease liabilities	(1,308)	(1,216)
	(2,213)	**(2,165)**

9. Taxation

Income tax expense	2021 £'000	2020 £'000
Current tax on profits for the year	1,124	1,132
Total current tax charge	**1,124**	**1,132**
Origination and reversal of temporary differences	8,199	(1,425)
Adjustment in respect of prior years	(512)	(708)
Total deferred tax charge/(credit)	**7,687**	**(2,133)**
Total tax charge/(credit)	**8,811**	**(1,001)**

The tax on the Group's loss before tax differs from the theoretical amount that would arise from applying the standard rate of corporation tax in the UK of 19.00% (2020: 19.00%) as follows:

	2021 £'000	2020 £'000
Loss on ordinary activities before taxation	(22,191)	(3,894)
Tax charge at 19.00% thereon (2020: 19.00%)	4,216	740
Effects of:		
Expenses not deductible for tax purposes	(984)	(303)
Overseas tax rate differences	196	112
Utilisation of previously unrecognised losses		300
Tax losses for which no deferred tax asset was recognised	(4,135)	(264)
Derecognition of previously recognised deferred tax assets	(8,190)	(825)
Share option schemes	(426)	159
Remeasurement of deferred tax – change in UK tax rate		374
Adjustments in respect of prior years	512	708
Total tax (charge)/credit for the year	**(8,811)**	**1,001**

Recognition of deferred tax assets is based on an assessment of future cash flow forecasts and the associated profitability of the Group's operations, an assessment which has restricted the ability of the Group to recognise deferred tax assets for current year UK, US and Singapore trading losses and has resulted in the partial reversal and de-recognition of previously recognised UK and US tax losses.

Deferred tax asset recognition has been restricted in the UK to reflect future forecast profitability, an assessment that includes the impact of the Group's consolidation and investment in central and functional roles in the UK. As a result, lower utilisation of UK deferred tax assets is projected which has restricted the ability to recognise deferred tax assets for current year losses and resulted in the partial reversal and de-recognition of previously recognised UK tax losses.

Deferred tax asset recognition has been restricted in the US to reflect future forecast profitability, an assessment that includes the impact of the Group's consolidation of its US manufacturing operations and the continued shift in the balance of future forecast manufacturing and hence profits from the Group's US operations to its UK and Asian operations. As a result, lower utilisation of US deferred tax assets is projected which has restricted the ability to recognise deferred tax assets for current year losses and resulted in the partial reversal and de-recognition of previously recognised US tax losses.

Deferred tax asset recognition has been restricted in Singapore due to the announced closure and planned cessation of operations at the Singapore manufacturing site in 2022.

The share option schemes amount shown above represents the change in the expected tax impact on the exercise of options, principally reflecting the reduction in future corporation tax deductions associated with a reduction in the number of options where performance criteria are expected to be achieved.

The Group's results report certain financial measures after a number of adjusted items with a tax impact of £1,803,000 credit (2020: £1,520,000 credit) as detailed in note 5.

Finance Act 2021, which was substantively enacted on 24 May 2021, included legislation to increase the rate of corporation tax to 25% from 1 April 2023. Accordingly, the closing UK deferred tax asset in the financial statements has been recognised in accordance with the rate enacted as part of the Finance Act 2021 with any timing differences expected to reverse on or after 1 April 2023 recognised at a corporation tax rate of 25%.

Deferred tax is measured at the tax rates that are expected to apply in the relevant territory in the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been substantively enacted at the balance sheet date.

Amounts recognised directly in equity	2021 £'000	2020 £'000
Aggregate current and deferred tax arising in the period and not recognised in net profit or loss or other comprehensive income but directly debited or credited to equity:		
Deferred tax: Share options	(93)	57
Total tax charge to equity for the year	**(93)**	**57**

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

10. Deferred Taxation

Deferred tax	2021 £'000	2020 £'000
At 1 January	5,767	3,819
Income statement (charge)/credit recognised in the year	(7,687)	2,133
Tax charge recognised directly in equity	(93)	57
Exchange differences	(17)	(242)
At 31 December	**(2,060)**	**5,767**

The amount of deferred tax asset expected to unwind within the next twelve months is £nil (2020: £1,058,000) in relation to utilisation of tax losses. The movement in deferred tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Group

Deferred tax liabilities	Accelerated Capital Allowances £'000	Intangibles £'000	Total £'000
At 1 January 2020	(10,851)	(5,031)	(15,882)
Credit to income statement	903	321	1,224
Exchange differences	153	14	167
At 31 December 2020	**(9,795)**	**(4,696)**	**(14,491)**
(Charge)/credit to income statement	(1,493)	561	(932)
Exchange differences	(82)	(20)	(102)
At 31 December 2021 before set-off	**(11,370)**	**(4,155)**	**(15,525)**
Set off of tax*			13,465
At 31 December 2021 after set-off			**(2,060)**

Deferred tax assets	Tax Losses £'000	Other £'000	Total £'000
At 1 January 2020	18,701	1,000	19,701
Charged to income statement	886	23	909
Charged to equity		57	57
Exchange differences	(427)	18	(409)
At 31 December 2020	**19,160**	**1,098**	**20,258**
Charged to income statement	(6,216)	(539)	(6,755)
Charged to equity		(93)	(93)
Exchange differences	52	3	55
At 31 December 2021 before set-off	**12,996**	**469**	**13,465**
Set off of tax*			(13,465)
At 31 December 2021 after set-off			**–**

* Deferred tax assets and deferred tax liabilities can only be offset in the statement of financial position if the entity has the legal right to settle current tax amounts on a net basis and the deferred tax amounts are levied by the same taxing authority on the same entity or different entities that intend to realise the asset and settle the liability at the same time.

Deferred tax assets are recognised for tax losses carried forward to the extent that the realisation of the related tax benefit through future taxable profits from the same trade is probable. The Group assesses future forecast taxable profit as probable by reference to its five year plan using underlying cash flow forecasts based on those used in the Group's goodwill impairment review. Any potential deferred tax asset assessed by reference to the level of future forecast taxable profit over this five year period has, in the current year, been restricted to the extent of taxable temporary differences due to the Group's current financial performance and recent history of taxable losses in its UK, US and Singapore operations.

The Group did not recognise deferred income tax assets of £31,260,000 (2020: £17,767,000) in respect of losses amounting to £134,808,000 (2020: £78,164,000) that can be carried forward against future taxable income. The deferred tax asset can be recognised if sufficient profits from the same trade arise in future periods.

Tax losses in the UK totalling £71,530,000 (2020: £61,778,000) have no date of expiry. Tax losses in Singapore totalling £20,711,000 (2020: £12,396,000) have no date of expiry. Tax losses in the US can be carried forward against future taxable income for 20 years before expiring. Of the Group's total US tax losses of £95,175,000 (2020: £96,178,000) losses amounting to £8,975,905 and £7,511,665 expire in 2022 and 2023.

Deferred tax liabilities have not been recognised for the withholding tax and other taxes that would be payable on the unremitted earnings of certain subsidiaries as such amounts are permanently reinvested.

A credit of £376,000 (2020: £291,000) has been recognised within operating profit in relation to claims made under the R&D Expenditure Credit Scheme (RDEC) in the UK.

Company

Deferred tax assets	Tax Losses £'000	Share Options £'000	Other Timing Differences £'000	Total £'000
At 1 January 2020	2,546	67	24	2,637
Credited/(charged) to income statement	1,157	190	(35)	1,312
Charged to equity		26		26
At 31 December 2020	**3,703**	**283**	**(11)**	**3,975**
(Charged)/credited to income statement	(3,703)	(124)	25	(3,802)
Charged to equity		(46)		(46)
At 31 December 2021	**–**	**113**	**14**	**127**

11. Dividends

No dividend has been paid or proposed in 2021 (2020: £nil).

12. Loss per share

Basic loss per share is calculated by dividing the loss attributable to ordinary shareholders by the weighted average number of ordinary shares in issue during the year.

Diluted loss per share is calculated by dividing the loss attributable to ordinary shareholders by the weighted average number of shares and the dilutive effect of 'in the money' share options in issue. Share options are classified as 'in the money' if their exercise price is lower than the average share price for the year. As required by IAS 33, this calculation assumes that the proceeds receivable from the exercise of 'in the money' options would be used to purchase shares in the open market in order to reduce the number of new shares that would need to be issued.

The directors also present an adjusted earnings per share measure which eliminates certain adjusted items. The Directors believe that the adjusted earnings per share measure provides a useful comparison of performance and allow management and other stakeholders to better compare the performance of the Group between the current and prior year, excluding the effects of certain non cash charges, non operational items and significant infrequent items that would distort period on period comparability. The adjustments are detailed in note 5.

	2021 £'000	2020 £'000
Loss attributable to ordinary shareholders	(31,002)	(3,271)
Adjustments to loss after tax (note 5)	11,721	5,595
Adjusted (loss)/profit attributable to ordinary shareholders	**(19,281)**	**2,324**

	2021 Number	2020 Number
Weighted average number of ordinary shares	801,653,662	797,228,579
Dilutive share options	4,097,303	11,395,298
Adjusted weighted average number of ordinary shares	**805,750,965**	**808,623,877**
Adjusted basic loss per share	(2.41p)	0.29p
Basic loss per share	(3.87p)	(0.41p)
Adjusted diluted loss per share	(2.41p)	0.29p
Diluted loss per share	(3.87p)	(0.41p)

Notes to the financial statements continued

For the year ended 31 December 2021

13. Intangible assets

Group	Goodwill £'000	Patents £'000	Development costs £'000	Software £'000	Customer contracts £'000	Total £'000
Cost						
At 1 January 2021	63,732	8,613	79,467	8,894	7,327	168,033
Additions		311	2,994	1,423		4,728
Foreign exchange	561	2	745	15	100	1,423
At 31 December 2021	**64,293**	**8,926**	**83,206**	**10,332**	**7,427**	**174,184**
Accumulated amortisation and impairment						
At 1 January 2021		4,972	43,664	6,298	7,327	62,261
Charge for the year		213	6,490	1,344	–	8,047
Impairment		2,796	4,615			7,411
Foreign exchange		2	493	4	100	599
At 31 December 2021	**–**	**7,983**	**55,262**	**7,646**	**7,427**	**78,318**
Net book value						
At 31 December 2021	**64,293**	**943**	**27,944**	**2,686**	**–**	**95,866**
At 31 December 2020	63,732	3,641	35,803	2,596		105,772

Group	Goodwill £'000	Patents £'000	Development costs £'000	Software £'000	Customer contracts £'000	Total £'000
Cost						
At 1 January 2020	66,730	7,945	76,945	8,849	7,728	168,197
Additions		677	4,678	54		5,409
Foreign exchange	(2,998)	(9)	(2,156)	(9)	(401)	(5,573)
At 31 December 2020	**63,732**	**8,613**	**79,467**	**8,894**	**7,327**	**168,033**
Accumulated amortisation and impairment						
At 1 January 2020		1,377	35,638	1,998	7,728	19,741
Charge for the year		133	6,430	1,306		7,869
Impairment		3,471	3,066			6,537
Foreign exchange		(9)	(1,470)	(6)	(401)	(1,886)
At 31 December 2020	–	**4,972**	**43,664**	**6,298**	**7,327**	**62,261**
Net book value						
At 31 December 2020	**63,732**	**3,641**	**35,803**	**2,596**	**–**	**105,772**
At 31 December 2019	66,730	6,568	41,307	3,851		118,456

Customer contract intangible assets relate to customer contracts acquired as part of a business combination.

The amortisation charge of £8,047,000 (2020: £7,869,000) and the impairment charge of £7,411,000 (2020: £6,537,000) have been charged to selling, general and administrative expenses in the Consolidated Income Statement.

Wireless operating segment development and patent cost impairment charges of £4,692,000 relate to the impairment of the Group's filter-related cREO™ patent and development costs. Photonics operating segment development and patent cost impairment charges of £2,716,000 relate to the impairment of the Group's photonic quasi-crystal patent and development costs. The impairments have arisen following the decision to pause development related activities given the current lack of visibility over the timeline to commercialisation of each of the technologies. The net book value of the assets has been impaired to £nil with the charge recognised in 'selling, general and administrative expenses' in the Consolidated Income Statement.

Wireless operating segment development and patent cost impairment charges of £6,537,000 in 2020 related to the impairment of the Group's non-filter related cREO™ patent and development costs. The net book value of the non-filter related cREO™ development costs and patent assets were impaired to £nil with the charge recognised in 'selling, general and administrative expenses' in the Consolidated Income Statement in 2020.

Impairment tests for goodwill

Goodwill is tested for impairment annually and whenever there is an indication of impairment at the level of the CGU to which it is allocated. Multiple production facilities and production assets are included in a single CGU reflecting that production can (and is) transferred between sites and production assets for different operating segments to suit capacity planning and operational efficiency. Given the interdependency of facilities and production assets, goodwill is tested for impairment by grouping operational sites and production assets into CGUs based on type of production.

	2021 £'000	2020 £'000
Allocation of goodwill by CGU		
Wireless	57,169	56,704
Photonics	7,124	7,028
Total Goodwill	**64,293**	**63,732**

The recoverable amount of the CGUs has been determined based on value in use calculations, using cash flow projections for a five year period plus a terminal value based upon a long term growth rate of 2% (2020: 2%).

Value in use calculations are based on the Group's Board approved 2022 budget and five year plan where revenue assumptions for years 4 and 5 have typically been extrapolated from year 3 using business segment growth rates that take account of industry trends, external market views and external market research.

The key assumptions applied in the 2021 cash flow forecast are summarised below:

2021	Year 1 %	Year 2 %	Year 3 %	Year 4 %	Year 5 %
Risk adjusted discount rate	16.5%	16.5%	16.5%	16.5%	16.5%
Photonics growth rate	2022 Budget	5 Year Plan	5 Year Plan	5.5%	5.5%
Wireless growth rate	2022 Budget	5 Year Plan	5 Year Plan	9.4%	9.4%

2020	Year 1 %	Year 2 %	Year 3 %	Year 4 %	Year 5 %
Risk adjusted discount rate	15.0%	15.0%	15.0%	15.0%	15.0%
Photonics growth rate	2021 Budget	3 Year Plan	3 Year Plan	14.4%	14.4%
Wireless growth rate	2021 Budget	3 Year Plan	3 Year Plan	12.4%	12.4%

The assumptions and growth rates contained in the Group's value in use calculations have been updated in 2022 to reflect the latest Board approved five year plan which comprises revenue, material costs and site manufacturing labour and overhead cost forecasts that have been assessed and updated by reference to a combination of customer and supplier specific information and market growth assumptions. The risk adjusted discount rate has been increased to reflect greater risk associated with the Group's growth forecasts given current financial performance of the business.

Photonics CGU

The recoverable amount of the Photonics CGU determined based on value in use calculations exceeds the carrying amount of the associated goodwill, other intangible assets and property, plant and equipment allocated to the CGU by greater than ~£50,000,000.

The Group has carried out a sensitivity analysis on the impairment test for the Photonics CGU, using various reasonably possible scenarios focused on changes in business segment growth rates and the discount rate applied in the value in use calculations.

Growth rates in the value in use calculations take account of continuing market demand for compound semiconductors, driven by macro trends of 5G and connected devices and the increasing proliferation of 3D and advanced sensing end use applications that require enabling compound semiconductor material. An impairment would arise on the carrying amount of the goodwill allocated to the Photonics CGU if the aggregated compound annual growth rate used in the value in use calculations to determine the recoverable amount was ~17.0% or less in the first five year period.

An impairment would arise on the carrying amount of the goodwill if the discount rate in the value in use calculations used to determine the recoverable amount of the Photonics CGU was increased to ~21.0%.

Wireless CGU

The recoverable amount of the Wireless CGU determined based on value in use calculations exceeds the carrying amount of the associated goodwill, other intangible assets and property, plant and equipment allocated to the CGU by greater than ~£65,000,000.

The Group has carried out a sensitivity analysis on the impairment test for the Wireless CGU, using various reasonably possible scenarios focused on changes in business segment growth rates and changes in the discount rate applied in the value in use calculations.

Growth rates in the value in use calculations take account of continuing market demand for compound semiconductors, driven by macro trends of 5G and connected devices where 5G network infrastructure and 5G mobile handsets are being enabled by next generation wireless compound semiconductor material. An impairment would arise on the carrying amount of the goodwill allocated to the Wireless CGU if the aggregated compound annual growth rate used in the value in use calculations to determine the recoverable amount was 15.0% or less in the first five year period.

An impairment would arise on the carrying amount of the goodwill allocated to the Wireless CGU if the discount rate in the value in use calculations used to determine the recoverable amount of the Wireless CGU was increased to ~22.0%.

Notes to the financial statements continued

For the year ended 31 December 2021

13. Intangible assets continued

Company	Patents £'000	Software £'000	Total £'000
Cost			
At 1 January 2021	7,169	870	8,039
Additions	285	708	993
At 31 December 2021	**7,454**	**1,578**	**9,032**
Accumulated amortisation			
At 1 January 2021	3,991	335	4,326
Charge for the year	181	140	321
Impairment	2,442		2,442
At 31 December 2021	**6,614**	**475**	**7,089**
Net book value			
At 31 December 2021	**840**	**1,103**	**1,943**
At 31 December 2020	3,178	535	3,713

Company	Patents £'000	Software £'000	Total £'000
Cost			
At 1 January 2020	6,329	865	7,194
Additions	840	5	845
At 31 December 2020	**7,169**	**870**	**8,039**
Accumulated amortisation			
At 1 January 2020	417	238	655
Charge for the year	103	97	200
Impairment	3,471		3,471
At 31 December 2020	**3,991**	**335**	**4,326**
Net book value			
At 31 December 2020	**3,178**	**535**	**3,713**
At 31 December 2019	5,912	627	6,539

Patent cost impairment charges of £2,442,000 relate to the impairment of filter related cREO™ patent costs and photonic quasi crystal patent costs. The impairments have arisen following the decision to pause technology development activities related to the patents given the current lack of visibility over the timeline to commercialisation of the technologies linked to the patents. The net book value of the patent assets has been impaired to £nil.

14. Property, plant and equipment

Group	Land and buildings £'000	Short leasehold improvements £'000	Fixtures and fittings £'000	Plant and machinery £'000	Total £'000
Cost					
At 1 January 2021	18,329	37,787	11,500	190,022	257,638
Additions		176	1,487	13,868	15,531
Disposals				(2,817)	(2,817)
Foreign exchange	178	384	285	1,769	2,616
At 31 December 2021	**18,507**	**38,347**	**13,272**	**202,842**	**272,968**
Accumulated depreciation					
At 1 January 2021	5,669	21,176	5,242	99,322	131,409
Charge for the year	921	2,097	1,201	9,090	13,309
Impairment		-		74	74
Disposals				(2,809)	(2,809)
Foreign exchange	31	184	95	945	1,255
At 31 December 2021	**6,621**	**23,457**	**6,538**	**106,622**	**143,238**
Net book value					
At 31 December 2021	**11,886**	**14,890**	**6,734**	**96,220**	**129,730**
At 31 December 2020	12,660	16,611	6,258	90,700	126,229

Property, plant and equipment includes assets in the course of construction with a net carrying value of £12,262,000 (2020: £nil).

Group	Land and buildings £'000	Short leasehold improvements £'000	Fixtures and fittings £'000	Plant and machinery £'000	Total £'000
Cost					
At 1 January 2020	19,238	39,326	11,335	192,350	262,249
Additions	(883)	143	615	4,859	4,734
Disposals			(547)	(2,761)	(3,308)
Foreign exchange	(26)	(1,682)	97	(4,426)	(6,037)
At 31 December 2020	**18,329**	**37,787**	**11,500**	**190,022**	**257,638**
Accumulated depreciation					
At 1 January 2020	4,649	19,896	4,644	96,578	125,767
Charge for the year	1,062	2,088	1,010	8,823	12,983
Disposals			(371)	(2,755)	(3,126)
Foreign exchange	(42)	(808)	(41)	(3,324)	(4,215)
At 31 December 2020	**5,669**	**21,176**	**5,242**	**99,322**	**131,409**
Net book value					
At 31 December 2020	**12,660**	**16,611**	**6,258**	**90,700**	**126,229**
At 31 December 2019	14,589	19,430	6,691	95,772	136,482

Negative land and building additions totalling £833,000 reflect an adjustment to the cost of construction for the Newport foundry following finalisation of costs with the contractor at the end of the construction contract.

Notes to the financial statements continued

For the year ended 31 December 2021

14. Property, plant and equipment continued

Company	Fixtures and fittings £'000
Cost	
At 1 January 2021	135
Additions	106
At 31 December 2021	**241**
Accumulated depreciation	
At 1 January 2021	120
Charge for the year	14
At 31 December 2021	**134**
Net book value	
At 31 December 2021	**107**
At 31 December 2020	15

Company	Fixtures and fittings £'000
Cost	
At 1 January 2020	123
Additions	12
At 31 December 2020	**135**
Accumulated depreciation	
At 1 January 2020	104
Charge for the year	16
At 31 December 2020	**120**
Net book value	
At 31 December 2020	**15**
At 31 December 2019	19

15. Right of use assets

Group	Land and buildings £'000	Fixtures and Fittings £'000	Plant and machinery £'000	Total £'000
Cost				
At 1 January 2021	51,050	17	681	51,748
Additions	10,531	6	123	10,660
Disposals	(558)		(88)	(646)
Foreign exchange	(174)		13	(161)
At 31 December 2021	**60,849**	**23**	**729**	**61,601**
Accumulated depreciation				
At 1 January 2021	14,154		255	14,409
Charge for the year	3,663	5	186	3,854
Disposals	(519)		(88)	(607)
Foreign exchange	(328)		6	(322)
At 31 December 2021	**16,970**	**5**	**359**	**17,334**
Net book value				
At 31 December 2021	**43,879**	**18**	**370**	**44,267**
At 31 December 2020	36,896	17	426	37,339

Group	Land and buildings £'000	Fixtures and Fittings £'000	Plant and machinery £'000	Total £'000
Cost				
At 1 January 2020	49,955		381	50,336
Additions	1,569	18	336	1,923
Foreign exchange	(474)	(1)	(36)	(511)
At 31 December 2020	**51,050**	**17**	**681**	**51,748**
Accumulated depreciation				
At 1 January 2020	10,848		133	10,981
Charge for the year	3,549		132	3,681
Foreign exchange	(243)	-	(10)	(253)
At 31 December 2020	**14,154**	**–**	**255**	**14,409**
Net book value				
At 31 December 2020	**36,896**	**17**	**426**	**37,339**
At 31 December 2019	39,107		248	39,355

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

16. Investments

Company	Investments in subsidiaries £'000	Total £'000
Cost		
At 1 January 2021	123,452	123,452
Subsidiaries share-based payments charge	827	827
At 31 December 2021	**124,279**	**124,279**
Provisions for impairment		
At 1 January 2021	32,032	32,032
Impairment	16,178	16,178
At 31 December 2021	**48,210**	**48,210**
Net book value		
At 31 December 2021	**76,069**	**76,069**
At 31 December 2020	91,420	91,420

Company	Investments in subsidiaries £'000	Other equity investments £'000	Total £'000
Cost			
At 1 January 2020	121,918	75	121,993
Acquisition of minority interest	1,438		1,438
Subsidiaries share-based payments charge	96		96
Disposals		(75)	(75)
At 31 December 2020	**123,452**	**–**	**123,452**
Provisions for impairment			
At 1 January 2020	32,032		32,032
At 31 December 2020	**32,032**	–	**32,032**
Net book value			
At 31 December 2020	**91,420**	**–**	**91,420**
At 31 December 2019	89,886	75	89,961

Details of the Company's subsidiaries are set out in note 29.

Investments are reviewed for impairment trigger events annually. This review includes a qualitative assessment of the business performance of each investment and a quantitative assessment of any potential impact on the carrying value of each investment arising from the results of the Group's value in use calculations prepared as part of the Group's goodwill impairment review.

The announced closure of the Group's manufacturing facility in Singapore has been identified as an impairment trigger event (2020: none) with the planned cessation of operations and closure of the manufacturing site in 2022 resulting in the impairment of the Company's investment in its Singapore subsidiaries from a carrying value of £5,353,000 to £nil.

The Group's value in use calculations prepared as part of the Group's goodwill impairment review has identified an impairment trigger event (2020: none) for the Company's investment in its sub-group, headed by Wafer Technology International Limited, where current and forecast future financial performance has declined. The decline in forecast future profitability, assessed by reference to the Group's value in use cash flow forecasts, has resulted in a £10,825,000 impairment in the Company's investment in its Wafer Technology sub-group.

Indicators that impairment losses might have reversed are assessed annually. No events indicating a reversal of impairment losses have been identified as part of the review in the current year (2020: none).

17. Inventories

Group	2021 £'000	2020 £'000
Raw materials and consumables	25,028	23,666
Work in progress and finished goods	6,682	7,221
	31,710	**30,887**

The directors are of the opinion that the replacement values of inventories are not materially different to the carrying values stated above. The carrying values are stated net of impairment provisions of £12,388,000 (2020: £11,551,000). £866,000 (2020: £3,025,000) of inventories were written down during 2021 and an expense recognised in the income statement.

18. Trade and other receivables

Current	2021 Group £'000	2021 Company £'000	2020 Group £'000	2020 Company £'000
Trade receivables	20,659		21,060	–
Other receivables	4,170	704	7,795	2,045
Contract assets	8,915		6,258	–
Prepayments	5,116	1,421	3,462	564
	38,860	**2,125**	**38,575**	**2,609**

Non-current	2021 Group £'000	2021 Company £'000	2020 Group £'000	2020 Company £'000
Amounts owed by group undertakings		132,677		133,314
Other financial assets				–
	–	**132,677**	**–**	**133,314**

Contract assets relate to bespoke manufactured customer products where the Group has a guaranteed contractual right of payment. Contract assets are transferred to receivables at the point that manufactured products are delivered to customers, except for supplier managed inventory arrangements where contract assets are transferred to receivables from the earlier of a specified contractual date following delivery or when the product is drawn from inventory by the customer. All 2020 contract assets have been transferred to receivables during 2021.

Amounts owed by Group undertakings are unsecured and repayable on demand. Interest is charged at a rate of 5% per annum (2020: 5% per annum).

The Group classifies other financial assets at amortised cost. Other financial assets are classified at amortised cost as the asset is held within a business model whose objective is to collect contractual cash flows and the contractual terms give rise to cash flows that are solely payments of principal and interest. Other financial assets relate to £8,800,000 of impaired Preferred A shares (2020: £8,800,000) issued by the Compound Semiconductor Centre Limited ('CSC'), a joint venture between the Group and Cardiff University (see note 30 for further details). The preference shares carry the following rights:

- No voting rights;
- Dividend equivalent to the HSBC Bank PLC base rate for the applicable period on the amount paid up, subject to CSC having available profits;
- Repayable in proportion to the outstanding principle from surplus cash generated.

The estimated fair values of trade receivables, other receivables, contract assets, other financial assets and amounts owed by group undertakings are set out in note 22.

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

19. Trade and other payables

Current	2021 Group £'000	2021 Company £'000	2020 Group £'000	2020 Company £'000
Trade payables	20,878	2,628	22,098	1,728
Amounts owed by group undertakings		24,972		20,490
Other taxation and social security	71	277	617	1,088
Other payables	1,346		1,033	27
Accruals and deferred income	14,788	2,510	11,857	2,298
	37,083	**30,387**	**35,605**	**25,631**

Accruals and deferred income include no contract liabilities (2020: £nil).

Amounts owed to group undertakings are unsecured and repayable on demand. Interest is charged at a rate of 5% per annum (2020: 5% per annum).

Other payables include the recognised mark to market fair value of £10,000 associated with foreign currency forward exchange contracts held at 31 December 2021 (2020: £nil) that do not qualify for hedge accounting. The foreign currency forward exchange contracts are classified as Level 2 financial instruments. The fair value of Level 2 financial instruments, such as over the counter foreign currency contracts have been determined using observable market data based on quoted market prices or market quotes for similar instruments. If all significant inputs required to fair value the instrument are observable, the instrument is included in level 2.

20. Borrowings

Group	2021 £'000	2020 £'000
Non-current borrowings		
Bank borrowings	10,365	16,539
Lease liabilities	49,693	42,226
	60,058	**58,765**
Current borrowings		
Bank borrowings	6,230	6,201
Lease liabilities	4,694	4,798
	10,924	**10,999**
Total borrowings	**70,982**	**69,764**

Bank Borrowings	2021 £'000	2020 £'000
Bank borrowings fall due for repayment as follows		
Within one year	6,230	6,201
Between one and five years	10,365	16,539
	16,595	**22,740**

On 30 December 2021, the Company refinanced its £25,900,000 ($35,000,000) multi currency revolving credit facility provided by HSBC Bank plc. The facility is secured on the assets of IQE plc and its subsidiary companies with a committed term to 30 April 2023 and an option to extend the facility for a further 12 months. Interest on the facility is payable at a margin of between 2.00 and 2.80 per cent per annum over SONIA on any drawn balances. The facility is undrawn at 31 December 2021 (2020: Undrawn).

On 29 August 2019 a subsidiary of the Group agreed a new £30,000,000 asset finance facility provided by HSBC Bank plc that is secured over various plant and machinery assets. The facility has a five year term and an interest rate margin of 1.65% per annum over base rate on any drawn balances.

The Group has complied with all the financial covenants of its borrowing facilities during 2021 and 2020.

Lease liabilities	2021 £'000	2020 £'000
Lease liabilities fall due for repayment as follows		
Within one year	4,694	4,798
Between one and five years	11,666	10,966
After five years	38,027	31,260
	54,387	**47,024**

Lease liabilities are effectively secured as the rights to the leased asset recognised in the financial statements revert to the lessor in the event of default. Lease liabilities principally relate to property.

21. Provisions for other liabilities and charges

Group	Restructuring £'000	Onerous Contract £'000	2021 Total £'000	Restructuring £'000	Onerous Contract £'000	2020 Total £'000
As at 1 January	162	1,840	**2,002**			–
Charged to the income statement	3,617		**3,617**	162	1,840	**2,002**
Utilised during the year	(342)	(138)	**(480)**			–
Foreign exchange	(3)		**(3)**			–
As at 31 December	3,434	1,702	**5,136**	162	1,840	**2,002**

Group	Restructuring £'000	Onerous Contract £'000	2021 Total £'000	Restructuring £'000	Onerous Contract £'000	2020 Total £'000
Current	2,946	740	**3,686**		515	**515**
Non current	488	962	**1,450**	162	1,325	**1,487**
Total	3,434	1,702	**5,136**	162	1,840	**2,002**

The restructuring provision relates to costs relating to the announced closure of the Group's manufacturing facility in Pennsylvania, USA and the Group's manufacturing facility in Singapore.

- The restructuring provision of £488,000 (2020: £162,000) associated with the announced closure of the Group's manufacturing facility in the USA relates to employee related costs that are expected to be utilised over a period up to 30 June 2024.
- The restructuring provision of £2,946,000 (2020: £nil) associated with the announced closure of the Group's manufacturing facility in Singapore relates to employee related costs of £1,540,000 and site decommissioning costs of £1,406,000 that are expected to be utilised over a period up to 30 June 2023.

The onerous contract provision represents the cost of minimum guaranteed future royalty payments associated with the cREO™ technology acquired from Translucent Inc. The onerous contract provision is expected to be utilised over a period up to 31 December 2024.

Company	2021 £'000	2020 £'000
As at 1 January	1,840	
Charged to the income statement		1,840
Utilised during the year	(138)	
Foreign exchange		
As at 31 December	**1,702**	**1,840**

Company	2021 £'000	2020 £'000
Current	740	515
Non current	962	1,325
As at 31 December	**1,702**	**1,840**

The onerous contract provision represents the cost of minimum guaranteed future royalty payments associated with the cREO™ technology acquired from Translucent Inc. The onerous contract provision is expected to be utilised over a period up to 31 December 2024.

Notes to the financial statements continued

For the year ended 31 December 2021

22. Financial Instruments

Financial instruments by category

Trade and other receivables (excluding prepayments) and cash and cash equivalents are classified as financial assets at amortised cost. Borrowings and trade and other payables are classified as financial liabilities at amortised cost. Both categories are initially measured at fair value and subsequently held at amortised cost. Financial instruments are classified as level 2 per the fair value hierarchy with the exception of preference share instruments which are classified as level 3.

Derivatives (forward exchange contracts) are classified as derivatives used for hedging and accounted for at fair value through profit and loss in the consolidated statement of comprehensive income.

Financial risk and treasury policies

The Group's finance team maintains liquidity, manages relations with the Group's bankers, identifies and manages foreign exchange risk and provides a treasury service to the Group's businesses. Treasury dealings such as investments, borrowings and foreign exchange are conducted only to support underlying business transactions. The Group has clearly defined policies for the management of foreign exchange rate risk. The Group finance team does not undertake speculative foreign exchange dealings for which there is no underlying exposure. Exposures resulting from sales and purchases in foreign currency are matched where possible and the net exposure may be hedged by the use of forward exchange contracts.

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and monies on deposit with financial institutions.

Customer credit risk is managed at the Group and site level with credit risk assessments completed for all customers. If no independent credit rating is available the credit quality of the customer is assessed by reference to the customers' financial position, past experience and other relevant factors. Individual credit limits are set based on internal or external ratings in accordance with the Group's credit risk policies. Where the Group assesses a potential credit risk, this is dealt with either by up-front payment or prior to the shipment of goods or by other credit risk mitigation measures. The Group has historically experienced low levels of payment default.

Counterparty risk associated with monies on deposit with financial institutions is managed at the Group level in accordance with the Group's treasury policies. The credit quality of banks has been assessed by reference to external credit ratings, based on reputable credit agencies long term issuer ratings.

Trade receivables and contract assets

The credit quality of trade receivables and contract assets that are not impaired have been assessed based on historical information about the counterparty default rate. The Group does not hold any receivable balances with customers with a history of past default.

Cash at bank

The credit quality of cash has been assessed by reference to external credit ratings, based on reputable credit agencies long term issuer ratings. The Group has cash at bank balances totalling £9,069,000 with banks with A1 credit ratings and cash at bank balances totalling £1,722,000 with A2 credit ratings.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial asset as set out below. In terms of trade receivables, the terms of sale provide that the Group has recourse to the products sold in the event of non-payment by a customer.

Assets as per balance sheet	2021 Group £'000	2021 Company £'000	2020 Group £'000	2020 Company £'000
Carrying amount				
Cash and cash equivalents	10,791	262	24,663	635
Trade receivables	20,659		21,060	
Amounts owed by group undertakings	-	132,677		133,314
Other receivables excluding prepayments	13,085	704	14,053	2,045
Financial Assets (Preference share receivables)	–			
	44,535	**133,643**	**59,776**	**135,994**

Included in other receivables are contract assets of £8,915,000 (2020: £6,258,000).

The Group is exposed to credit concentration risk with its three largest customers which represent 47% (2020: 51%) of outstanding trade receivables and contract asset balances. Customer credit risk is managed according to strict credit control policies. The majority of the Group's revenues are derived from large multinational organisations that are established customers of the Group with no prior history of default such that credit risk is considered to be low. The Group monitors customer credit ratings and has had no material defaults in the past.

Group	Gross 2021 £'000	Provision 2021 £'000	Net 2021 £'000	Gross 2020 £'000	Provision 2020 £'000	Net 2020 £'000
Not past due	16,029		16,029	16,864		16,864
Past due 0-30	3,439		3,439	4,117		4,117
Past due more than 30	1,606	(415)	1,191	531	(452)	79
	21,074	**(415)**	**20,659**	**21,512**	**(452)**	**21,060**

Allowance for bad and doubtful debt	2021 £'000	2020 £'000
At 1 January	452	223
Charged to the income statement	(34)	230
Utilised during the year	(5)	
Foreign exchange	2	(1)
	415	452

As at 31 December 2021, 76% (2020: 78%) of trade receivables were within terms. Of the other trade receivables, 68% (2020: 89%) were less than 30 days past due. An allowance has been made for estimated irrecoverable amounts from the sale of goods of £415,000 (2020: £452,000). This allowance has been determined on an expected credit loss basis by reference to past default experience. The individually impaired receivables mainly relate to a number of independent customers. A portion of these receivables is expected to be recovered.

The carrying values of trade and other receivables also represent their estimated fair values. Trade receivables and contract assets are primarily denominated in US dollars, as are trade payables, limiting the exposure of the Group to movements in foreign exchange rates. Based on the balances held at 31 December 2021 a 1 cent movement in the US dollar to Sterling rate would impact the net value of these instruments by £72,000 (2020: £48,000).

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group manages its funding to ensure, as far as possible, that 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 uses weekly cash flow forecasts to monitor cash requirements and to optimise its borrowing position. The Group ensures that it has sufficient borrowing facilities to meet foreseeable operational expenses. At the year end the Group had available undrawn facilities of £30,900,000 (2020: £30,735,000).

The following table illustrates the contractual maturities of financial liabilities, including interest payments, where applicable and excluding the impact of netting agreements on an undiscounted basis.

Contractual cash flow maturities – Other financial liabilities at amortised cost 31 December 2021	Group Carrying amount £'000	Group Contractual Cash flows £'000	Group Less than 12 months £'000	Group 1–2 Years £'000	Group 2–5 Years £'000	Group 5+ Years £'000
Trade and other payables	22,224	22,224	22,224			
Accruals	14,788	14,788	14,788			
Bank borrowings	16,595	16,670	6,250	6,250	4,170	
Lease liabilities	54,387	61,007	5,955	5,823	17,670	31,559
	107,994	**114,689**	**49,217**	**12,073**	**21,840**	**31,559**

Contractual cash flow maturities – Other financial liabilities at amortised cost 31 December 2020	Group Carrying amount £'000	Group Contractual Cash flows £'000	Group Less than 12 months £'000	Group 1–2 Years £'000	Group 2–5 Years £'000	Group 5+ Years £'000
Trade and other payables	23,131	23,131	23,131			
Accruals	11,857	11,857	11,857			
Bank borrowings	22,740	23,923	6,715	6,568	10,640	
Lease liabilities	47,024	53,194	5,931	4,649	13,721	28,893
	104,752	**112,105**	**47,634**	**11,217**	**24,361**	**28,893**

22. Financial Instruments continued

Contractual cash flow maturities – Other financial liabilities at amortised cost 31 December 2021	Company Carrying amount £'000	Company Contractual Cash flows £'000	Company Less than 12 months £'000	Company 1–2 Years £'000	Company 2–5 Years £'000	Company 5+ Years £'000
Trade and other payables	2,628	2,628	2,628			
Amounts owed to group undertakings	24,972	24,972	24,972			
Accruals	2,510	2,510	2,510			
	30,110	**30,110**	**30,110**	**–**	**–**	**–**

Contractual cash flow maturities – Other financial liabilities at amortised cost 31 December 2020	Company Carrying amount £'000	Company Contractual Cash flows £'000	Company Less than 12 months £'000	Company 1–2 Years £'000	Company 2–5 Years £'000	Company 5+ Years £'000
Trade and other payables	1,755	1,755	1,755			
Amounts owed to group undertakings	20,490	20,490	20,490			
Accruals	2,298	2,298	2,298			
	24,543	**24,543**	**24,543**	**–**	**–**	**–**

Financial risk management

Market risk – Foreign Exchange Risk

The Group operates internationally with operations in the United Kingdom, United States of America, Taiwan and Singapore and is exposed to foreign exchange risk arising from various currency exposures, primarily relating to fluctuations in exchange rates between UK sterling, US dollars, Taiwanese dollars and Singapore dollars. The Group's presentational currency is sterling and foreign exchange risk arises from a combination of future commercial transactions, recognised assets and liabilities denominated in a currency that is not the functional currency of the relevant group entity and net investments in the Group's foreign operations.

The majority of the Group's sales are denominated in US dollars and therefore the Group's cash flows are affected by fluctuations in the rate of exchange between US dollar and UK Sterling, Taiwanese dollar and Singapore dollar exchange rates given that the Group is required to fund certain costs at its operations in the United Kingdom, Taiwan and Singapore in local currencies. Foreign exchange risk of this nature is managed using a combination of the natural currency hedge within the Group's operating model given that a significant proportion of the Group's costs, including the purchase of certain key raw materials are denominated in US dollars, and, via the use of derivative foreign currency forward exchange contracts.

Derivative foreign currency forward exchange contracts are only used for economic hedging purposes and not as speculative investments. Derivative foreign currency forward exchange contracts that do not meet the hedge accounting criteria are classified as 'held for trading' for accounting purposes and are accounted for at fair value through profit or loss. These derivative instruments are presented as current assets or liabilities to the extent they are expected to be settled within 12 months after the end of the reporting period. As at 31 December 2021 (2020: £nil) the fair value of foreign currency forward exchange contracts held for trading and recognised in 'Other payables' within current liabilities was £10,000. The group's accounting policy for its cash flow hedges is set out in note 2.18.

The Group has certain investments in foreign operations in North America, Taiwan and Singapore, whose net assets are exposed to foreign currency translation risk. Translation exposures that arise on converting the results of overseas subsidiaries are not hedged. As a guide to the sensitivity of the Group's results to movements in foreign currency exchange rates, a one cent movement in the US dollar to Sterling rate would impact annual earnings by approximately £239,000 (2020: £333,000).

Cash flow and fair value interest rate risk

The Board is aware of the risks associated with changes in interest rates and does not speculate on future changes in interest rates. Historically the Group has not undertaken any hedging activity in this area although the board keeps this under regular review.

The Group's interest rate risk arises from its cash and cash equivalents, its preference share financial assets and from its bank borrowings. Cash and cash equivalents, including foreign currency cash deposits earn interest at prevailing variable market rates of interest whilst the preference share debt earns interest at HSBC Bank Plc base rate.

The Group's bank borrowings consist of a variable rate asset finance loan secured against the assets to which it relates and a variable rate multi currency revolving credit facility secured against the assets of the Group.

The variable rate UK sterling £30,000,000 asset finance facility which has a principal outstanding of £15,670,000 (2020: £22,920,000) has a five year term and an interest rate margin of 1.65% per annum over base rate on any drawn balances. The loan is repayable by monthly instalment commencing on the first anniversary of the facility.

The variable rate US dollar $35,000,000 (£25,900,000) multi currency revolving credit facility, which is undrawn, has a committed term to 30 April 2023 and an option to extend the facility for a further 12 months. Interest on the facility is payable at a margin of between 2.00 and 2.80 per cent per annum over SONIA.

The Group's policy is to regularly review its exposure to interest rate risk, and in particular the mix between fixed and floating rate financial assets and financial liabilities. The percentage of financial assets and financial liabilities bearing variable rate interest was 100% (2020: 100%).

As a guide to the sensitivity of the Group's results to movements in interest rates, a 50 basis point (0.5%) movement in interest rates on the interest bearing financial assets held at 31 December 2021 would impact annual interest income by approximately £nil (2020: £nil). A 50 basis point (0.5%) movement in interest rates on the interest bearing liabilities held at 31 December 2021 would impact annual interest costs by approximately £83,000 (2020: £111,000).

Capital risk management

The Group's main objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group sets the amount of capital in proportion to risk. The Group manages the capital structure and adjusts it in the light of changes in economic conditions and the characteristics of the underlying assets. The Group monitors capital by reviewing net debt against shareholders' funds. The position of these indicators and the movement during the year is shown in the Five Year Financial Summary.

The Group defines total capital as equity in the consolidated balance sheet plus net debt or less net funds. Total capital at 31 December 2021 was £298,830,000 (2020: £305,536,000). The Group monitors capital on the basis of a gearing ratio. The gearing ratio is calculated as net debt divided by total capital and at 31 December 2021 was 20.1% (2020: 14.8%).

All covenants in relation to the Group's borrowing facilities have been complied with during the year.

Fair values

Fair values of financial assets and liabilities, together with the carrying amounts shown in the balance sheet, are as follows:

Group	2021 Carrying amount £'000	2021 Fair value £'000	2020 Carrying amount £'000	2020 Fair value £'000
Cash and cash equivalents	10,791	10,791	24,663	24,663
Trade receivables	20,659	20,659	21,060	21,060
Other receivables	4,170	4,170	7,795	7,795
Contract assets	8,915	8,915	6,258	6,258
Financial Assets (Preference share receivables)		163		163
Trade and other payables	(22,224)	(22,224)	(23,131)	(23,131)
Bank borrowings	(16,595)	(16,595)	(22,740)	(22,740)
	5,716	**5,879**	**13,905**	**14,068**

Company	2021 Carrying amount £'000	2021 Fair value £'000	2020 Carrying amount £'000	2020 Fair value £'000
Cash and cash equivalents	262	262	635	635
Amounts owed by group undertakings	132,677	132,677	133,311	133,311
Other receivables	704	704	2,045	2,045
Trade and other payables	(27,600)	(27,600)	(22,245)	(22,245)
	106,043	**106,043**	**113,749**	**113,749**

Basis for determining fair value

The following summarises the significant methods and assumptions used in estimating the fair values of financial instruments reflected in the table above.

Cash and cash equivalents

Cash and cash equivalents earn interest at prevailing variable market rates of interest such that the carrying value of cash and cash equivalents is deemed to reflect fair value.

Trade receivables, other receivables and contract assets

Trade receivables, other receivables and contract assets are short term assets with a remaining life of less than one year such that the amortised cost carrying value of the assets is deemed to reflect fair value.

Financial Assets (Preference share receivables)

The fair value of preference share receivables was calculated by reference to assumptions about forecast future financial performance of CSC and the associated level of expected credit losses.

Amounts owed by group undertakings

Amounts owed by group undertakings are long term assets with a remaining life of greater than one year with outstanding balances accruing interest at a rate of 5% per annum such that the amortised cost carrying value of the assets is deemed to reflect fair value.

Trade and other payables

Trade and other payables are short term liabilities with a remaining life of less than one year such that the amortised cost carrying value of the liabilities is deemed to reflect fair value.

Bank borrowings

The carrying value of bank borrowings is deemed to reflect fair value as interest payable on bank borrowings is charged at a variable rate assessed as close to current market rates.

Notes to the financial statements continued

For the year ended 31 December 2021

23. Share capital

Group and Company	2021 Number of shares	2021 £'000	2020 Number of shares	2020 £'000
Allotted, called up and fully paid				
Ordinary shares of 1p each	803,555,756	8,036	800,364,569	8,004

The movement in the number of ordinary shares during the year was:

	2021 Number	2020 Number
At 1 January	800,364,569	796,142,302
Employee share schemes	3,191,187	1,615,578
IQE Taiwan minority interest acquisition – equity consideration		2,606,689
At 31 December	**803,555,756**	**800,364,569**

3,191,187 ordinary shares (2020: 4,222,267 ordinary shares) were issued during the year as follows:

	2021 Number of shares	2021 Consideration	2020 Number of shares	2020 Consideration
Employee share schemes	3,191,187	1.0p to 23.0p	1,615,578	Nil to 15.0p
IQE Taiwan minority interest acquisition			2,606,689	55.15p
	3,191,187		**4,222,267**	

The share premium arising from consideration received from employee share scheme exercises of £172,000 (2020: £240,000) was £447,000 (2020: £388,000).

The share premium arising from the non-cash equity consideration paid to minority interest shareholders in IQE Taiwan Corporation for the purchase of their minority equity shareholdings was £nil (2020: £1,112,000).

24. Share based payments

The total amount charged to the income statement in 2021 in respect of share based payments was £1,691,000 (2020: £265,000).

Long-term incentive plan

The IQE Plc Share Option Scheme was adopted on 26 May 2000 and amended by shareholders at the Annual General Meeting on 17 May 2002. Under the scheme, the Remuneration Committee can grant long term incentive awards over shares in the company to directors and employees of the Group.

Long term incentive share awards are granted with contractual lives of between three and ten years with a fixed exercise price of 1 penny equal to the nominal value of the ordinary share.

Directors

Long term incentive awards become exercisable between three and ten years from the date of grant subject to continued employment and achievement of performance conditions relating to growth in earnings per share and total shareholder return targets over a three year vesting period that cannot be extended. The Group has no legal or constructive obligation to repurchase or settle the options in cash.

Details of the Director's long term incentive plan are set out in the Remuneration Report.

Employees

Long term incentive awards become exercisable between three and five years from the date of grant subject to continued employment and the achievement of performance conditions relating to a combination of growth in earnings per share targets over a three year vesting period that cannot be extended and growth in earnings per share and total shareholder return targets over a three year vesting period that cannot be extended. The Group has no legal or constructive obligation to repurchase or settle the options in cash.

Long term incentive awards are valued using either the Black Scholes option pricing model or the Monte Carlo simulation model with the total fair value of the award that is to be expensed charged to the income statement over the vesting period of the long term incentive award.

Share option scheme

The IQE Plc Share Option Scheme was adopted on 26 May 2000 and amended by shareholders at the Annual General Meeting on 17 May 2002. Under the scheme, the Remuneration Committee can grant options over shares in the company to employees of the Group.

Options are granted with a contractual life of ten years and with a fixed exercise price equal to the market value of the shares under option at the date of grant or as otherwise disclosed in the remuneration report. Options become exercisable between one and ten years from the date of grant subject to continued employment and the achievement of performance conditions, including growth in EBITDA and earnings per share against various targets. The Group has no legal or constructive obligation to repurchase or settle the options in cash.

Share options are valued using the Black Scholes option pricing model with the total fair value of the award that is to be expensed charged to the income statement over the vesting period of the share option.

The principal assumptions used in the calculation of the fair value of long term incentive awards and share option awards are as follows:

Principal assumptions	**2021**	**2020**
Weighted average share price at grant date	19.94	45.19
Weighted average exercise price	5.99	17.54
Weighted average vesting period (years)	3	3
Option life (years)	10	10
Weighted average expected life (years)	3	3
Weighted average expected volatility factor	70%	60%
Weighted average risk free rate	0.6%	0.7%
Dividend yield	0%	0%

The expected volatility factor is based on historical share price volatility over the three years immediately preceding the grant of the option. The expected life is the average expected period to exercise. The risk free rate of return is the yield of zero coupon UK government bonds of a term consistent with the assumed option life.

Non market performance conditions are incorporated into the calculation of fair value by estimating the proportion of share options that will vest and be exercised based on a combination of historical trends and future expected trading performance. These are reassessed at the end of each period for each tranche of unvested options.

The fair value of long term incentive awards and share options granted during the year ended 31 December 2021 was £4,497,360 (2020: £2,296,000).

The weighted average fair value of long term incentive awards granted during the year ended 31 December 2021 was 71.1p (2020: 20.1p).

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

24. Share based payments continued

The movements on long term incentive awards and share options during the year were as follows:

	2021 Number of options	2021 Average exercise price (pence)	2020 Number of options	2020 Average exercise price (pence)
At 1 January	22,081,637	10.08p	20,639,474	17.11p
Granted	6,437,146	1.00p	8,337,449	1.80p
Exercised	(2,506,993)	17.64p	(1,274,323)	1.93p
Cancelled/lapsed	(1,603,675)	24.43p	(5,620,963)	23.36p
At 31 December	**24,408,115**	**5.99p**	**22,081,637**	**10.08p**

The weighted average share price at the date share options were exercised was 57.2p (2020: 53.05p).

As at 31 December 2021, the total number of long term incentive awards and share options held by employees was 24,408,115 (2020: 22,081,637) as follows:

Option price pence/share	Option period ending	2021 Number of options	2020 Number of options
9.15p – 50.25p	31 December 2021		1,271,715
1.00p – 28.17p	31 December 2022	430,423	782,418
1.00p – 27.75p	31 December 2023	4,150,061	3,646,379
1.00p – 23.83p	31 December 2024	3,321,245	4,274,648
18.42p – 25.17p	31 December 2025	211,250	232,500
1.00p – 37.92p	31 December 2026	252,000	1,108,500
1.00p – 169.50p	31 December 2027	407,500	495,000
1.00p – 143.30p	31 December 2028	240,000	290,000
1.00p – 125.00p	31 December 2029	3,408,779	1,595,211
1.00p	31 December 2030	5,895,388	5,385,266
1.00p	31 December 2031	6,091,469	
At 31 December		**24,408,115**	**22,081,637**

25. Parent company profit and loss

As permitted by Section 408 of the Companies Act 2006, the income statement of the parent company is not presented as part of these financial statements. The parent company's loss for the financial year amounted to £29,272,000 (2020: £7,586,000 loss).

26. Cash generated from operations

Group	2021 £'000	2020 £'000
Loss before tax	(22,191)	(3,894)
Finance costs	2,213	2,165
Depreciation of property, plant and equipment	13,309	12,983
Depreciation of right of use assets	3,854	3,681
Amortisation of intangible assets	8,047	7,869
Impairment of intangible assets	7,711	6,537
Impairment of PP&E	74	
Impairment of financial assets		3,788
Share of joint venture		(3,788)
Inventory write downs (note 17)	866	3,025
Loss/(profit) on disposal of fixed assets	(77)	182
Non cash provision movements	3,617	2,002
Share based payments	1,691	265
Cash inflow from operations before changes in working capital	**18,814**	**34,815**
(Increase)/decrease in inventories	(1,368)	(4,128)
Decrease/(increase) in trade and other receivables	2,930	(7,151)
(Decrease)/increase in trade and other payables	(1,493)	11,921
Cash inflow from operations	**18,883**	**35,457**

Company	2021 £'000	2020 £'000
Loss before tax	(25,470)	(8,898)
Finance income	(5,493)	(5,716)
Finance costs	145	340
Foreign exchange	307	(214)
Depreciation of property, plant and equipment	14	16
Amortisation of intangible assets	321	200
Impairment of intangible assets	2,742	3,471
Impairment of investments	16,178	
Loss on disposal of equity investment		75
Non cash provision movements		1,840
Share based payments	915	60
Cash outflow from operations before changes in working capital	**(10,341)**	**(8,826)**
(Increase)/decrease in trade and other receivables	3,926	(51)
Increase/(decrease) in trade and other payables	4,078	6,541
Cash outflow from operations	**(2,337)**	**(2,336)**

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

27. Reconciliation of net cash flow to movement in net funds/(debt)

	2021 £'000	Restated 2020 £'000
(Decrease)/increase in cash in the year	(11,080)	16,003
Increase in borrowings		(5,000)
Repayment of borrowings	6,145	7,030
Repayment of leases	3,705	2,548
Net movement resulting from cash flows	**(4,230)**	**20,581**
Net debt at 1 January	**(45,101)**	**(63,948)**
Net movement resulting from cash flows	(4,230)	20,581
Non cash movements	(10,860)	(1,734)
Net debt at 31 December	**(60,191)**	**(45,101)**

Non cash movements include £11,397,000 (2020: £1,923,000) of new lease liabilities and the impact of foreign exchange of £537,000 (2020: £189,000).

The comparative financial information for 2020 has been restated as described in the footnote to the consolidated cash flow statement.

28. Analysis of net debt

	At 1 January 2021 £'000	Cash flow £'000	Other non-cash movements £'000	At 31 December 2021 £'000
Bank borrowings due after one year	(16,539)		6,174	(10,365)
Bank borrowings due within one year	(6,201)	6,145	(6,171)	(5,230)
Lease liabilities due after one year	(12,226)		(7,467)	(49,693)
Lease liabilities due within one year	(4,798)	3,705	(3,601)	(4,694)
Total borrowings	(69,764)	9,850	(11,068)	(70,982)
Cash and cash equivalents	21,663	(11,080)	208	10,791
Net debt	**(45,101)**	**(4,230)**	**(10,860)**	**(60,191)**

Cash and cash equivalents at 31 December 2020 and 31 December 2021 comprised balances held in instant access bank accounts and other short term deposits with a maturity of less than 3 months.

Non cash movements include £11,397,000 (2020: £1,923,000) of new lease liabilities and the impact of foreign exchange of £537,000 (2020: £189,000).

29. Subsidiary undertakings

Name of company	Class of capital	Proportion of shares held	Activity	Country of incorporation	Registered Office
IQE (Europe) Limited	Ordinary shares of £1	100%*	Manufacture of advanced semiconductor materials	UK	Pascal Close, St Mellons, Cardiff CF3 0LW, UK
IQE Inc	Common stock of $0.001	100%*	Manufacture of advanced semiconductor materials	USA	119 Technology Drive, Bethlehem, PA 18015, USA
IQE KC LLC	Limited liability company	100%*	Manufacture of advanced semiconductor materials	USA	200 John Hancock Road, Taunton, MA 02780, USA
IQE Taiwan ROC	Ordinary shares of NT$10	100%	Manufacture of advanced semiconductor materials	Taiwan	No. 2-1, Li Hsin Road Hsinchu Science Park Hsinchu 300, Taiwan
IQE RF LLC	Limited liability company	100%*	Manufacture of advanced semiconductor materials	USA	265 Davidson Avenue Somerset, NJ 08873, USA
IQE Silicon Compounds Limited	Ordinary shares of £1	100%	Manufacture of silicon epitaxy	UK	Pascal Close, St Mellons, Cardiff CF3 0LW, UK
MBE Technology Pte Ltd	Preferred shares of S$1 Ordinary shares of S$1	100% 100%	Manufacture of advanced semiconductor materials	Singapore	30 Tampines Industrial Avenue 3 Singapore 528775
CSDC Private Limited	Common stock of $1 par value	100%*	Research, development and Manufacture of semiconductor materials	Singapore	30 Tampines Industrial Avenue 3 Singapore 528775
Wafer Technology Limited	Ordinary shares of £1	100%*	Manufacture of semiconductor compounds and ultra high purity materials	UK	Pascal Close, St Mellons, Cardiff CF3 0LW, UK
NanoGaN Limited	Ordinary shares of £0.001	100%	Development of advanced semiconductor materials	UK	Pascal Close, St Mellons, Cardiff CF3 0LW, UK
Galaxy Compound Semiconductors Inc	Common stock of $0.00 par value	100%*	Manufacture of semiconductor compounds and ultra high purity materials	USA	9922 E Montgomery Avenue, #7, Spokane, WA 99206, USA
EPI Holdings Limited	Ordinary shares of £1	100%	Dormant holding company	UK	Pascal Close, St Mellons, Cardiff CF3 0LW, UK
KTC Wireless LLC	Limited liability company	100%	Dormant holding company	USA	119 Technology Drive, Bethlehem, PA 18015, USA
IQE USA Inc	Limited liability company	100%	Dormant holding company	USA	119 Technology Drive, Bethlehem, PA 18015, USA
IQE Solar LLC	Limited liability company	100%*	Dormant company	USA	119 Technology Drive, Bethlehem, PA 18015, USA
IQE Properties Inc	Limited liability company	100%*	Property holding company	USA	119 Technology Drive, Bethlehem, PA 18015, USA
Wafer Technology International Limited	Ordinary shares of £1	100%	Dormant holding company	UK	Pascal Close, St Mellons, Cardiff CF3 0LW, UK

* Indirect holding

The proportion of voting rights of subsidiaries held by the Group is the same as the proportion of shares held.

All UK subsidiaries are exempt from the requirements to file audited financial statements by virtue of section 479A of the Companies Act 2006. In adopting the exemption, IQE plc has provided a statutory guarantee to these subsidiaries in accordance with section 479C of the Companies Act 2006.

Financial Statements

Notes to the financial statements continued

For the year ended 31 December 2021

30. Joint Venture

The Group holds investments in one joint venture as follows.

Name of company	Class of capital	Proportion of shares held	Activity	Country of incorporation	Registered Office
Compound Semiconductor Centre Limited	Common stock of £1 par value	50%*	Research, development and Manufacture of semiconductor materials	UK	Pascal Close, St Mellons, Cardiff CF3 0LW, UK

* Indirect holdings

Compound Semiconductor Centre Limited ('CSC')

On 9 July 2015 the Group entered into a joint venture agreement with Cardiff University to create the CSC in the United Kingdom. The shareholder agreement establishes that the CSC is jointly controlled by the shareholders who have an equal share of the voting rights such that the Group's investment in the joint venture is accounted for using the equity method in accordance with the accounting policies set out in note 2 and note 3.

The commercial purpose of the CSC is the research, development and manufacture by metal organic vapour phase epitaxy ('MOVPE') of advanced compound semiconductor materials in Europe.

The business was set up by the joint venture partners to provide a bridge between early stage research and high volume manufacturing and was established in a manner to provide the CSC with the capability to deliver specialist compound semiconductor product development, prototyping and early stage manufacturing services to academic and industrial customers from its own compound semiconductor foundry.

On the formation of the joint venture the Group contributed fixed assets, independently valued at £12,000,000, transferred employees and licensed intellectual property to establish the CSC's manufacturing and technical capability whilst at the same time entering into an agreement with CSC that has been extended in the current year and conveys to the Group the right to use the assets of the joint venture for a minimum period up to 31 March 2022 (see note 3a). Cardiff University contributed cash.

The intellectual property licensed relates to technical know-how and is licensed to the CSC under the terms of a perpetual licence that can only be terminated in a limited number of circumstances, none of which currently apply as the CSC is not in breach of the license agreement. The Group has no obligation to enhance or develop the licensed intellectual property. The licence fee of £20,000,000, mutually agreed by the Group and Cardiff University was recognised as license income in accordance with the Group's revenue recognition policy for perpetual licenses (see note 2) in 2015 and 2016 when the intellectual property was transferred to the CSC.

The contractual right granted by the CSC to the Group to use its assets provides the Group with access to manufacturing capacity and de-risks the initial establishment of the CSC as the Group operates as a cornerstone customer during the early stages of the development of the CSC's business when it is required to fund running costs associated with its foundry whilst developing its business and own independent revenue streams.

Costs associated with the right to use the assets of the CSC are charged to the Group at a mutually agreed price by the Group and Cardiff University. The price reflects the Group's right to use the assets and is variable based on the CSC's cash cost of production (including direct labour, materials and other foundry costs) which provides the CSC with a low cost, low risk route to build its business whilst covering its manufacturing related operating costs.

The arrangements between the joint venture parties, structured to provide the Group with its required level of manufacturing capacity and to provide the CSC with sufficient flexibility to develop its business envisaged that reliance on the Group as the cornerstone customer will reduce. The CSC continues to achieve key business milestones, including the development of its own independent commercial customer relationships and funded collaborative research and development projects which has resulted in its reliance on the Group gradually reducing as these independent relationships and revenue streams continue to develop with external revenue totalling £1,732,000 (2020: £1,973,000). The CSC's financial year end is 31 December which is coterminous with the Group and has been used to prepare the consolidated Group financial statements and the summary CSC financial information set out below. No dividend has been received by the Group from the CSC (2020: £nil).

Summary information for Compound Semiconductor Centre Limited

£'000	2021 £'000	2020 £'000
Revenue	8,222	8,637
EBITDA	78	276
Profit from continuing operations	1,208	1,490
Profit for the period	1,208	1,490
Total comprehensive income for the period	**1,208**	**1,490**

Summary balance sheet	2021 £'000	2020 £'000
Non current assets	5,057	5,823
Current assets	2,026	2,221
Current Liabilities	(1,846)	(1,636)
Non current Liabilities	(10,212)	(12,593)
Equity attributable to Joint Venturers	**(4,975)**	**(6,185)**

Carrying value of equity interest in CSC Ltd	2021 £'000	2020 £'000
Net liabilities of CSC Ltd	(4,975)	(6,185)
Proportion of the Groups ownership interest	50%	50%
Groups share of net liabilities	(2,487)	(3,091)
Elimination of unrealised gains on transactions with CSC Ltd	(12,000)	(12,000)
Cumulative absorption of JV losses against long term JV preference share debt (note 5)	163	163
Cumulative unrecognised losses	14,324	14,928
Carrying amount of the Groups interest in the JV	–	–

Summary of cumulative unrecognised losses	2021 £'000	2020 £'000
Unrecognised losses brought forward	(17,642)	(14,600)
Unrecognised unrealised gains on transactions with CSC Ltd		
Profit in the year	604	746
Reversal/absorption of JV losses against long term JV preference share debt (note5)		(3,788)
Cumulative unrecognised losses carried forward	**(17,038)**	**(17,642)**

Comparative financial information has been adjusted to reflect the final audited 2020 CSC financial statements. The adjustment to the disclosure has had no impact on the Group's consolidated loss for the year, total net assets or cash position.

31. Acquisitions

IQE Taiwan ROC

On 5 October 2020, the group acquired the remaining 9.82% of issued shares held by third party minority shareholders in its subsidiary, IQE Taiwan ROC, taking its equity ownership from 90.18% to 100.00%. Immediately prior to the purchase, the carrying amount of the existing 9.82% non controlling interest in IQE Taiwan ROC was £4,335,000.

The acquisition was effected using a statutory share swap arrangement under Taiwan's Business Mergers and Acquisition Law (the 'Share Swap') with the final total consideration payable to the minority shareholders determined by the Taiwan Court in 2021.

Selling shareholders, representing 5.04% of the issued shares in IQE Taiwan ROC accepted the Share Swap and in 2020 received an aggregate consideration of £1,437,646 which was settled via the issuance of 2,606,689 ordinary shares in IQE plc at a price per ordinary share of 55.15p.

Selling shareholders, representing 4.78% of the issued shares in IQE Taiwan ROC rejected the Share Swap and had their shares purchased for cash based at a price determined by the Taiwan Court as part of the normal process followed under Taiwan's Business Mergers and Acquisition Law. Cash consideration of £1,363,000 was paid in 2020 to selling shareholders who rejected the Share Swap with further cash consideration and interest of £1,739,000 paid to these selling shareholders in 2021 following a final price determined by the Taiwan Court.

The Group recognised a decrease in non controlling interests of £1,335,000. The effect on the equity attributable to the owners of IQE Taiwan ROC following the final purchase price determination by the Taiwan Court during the current year is summarised as follows:

	2021 £'000	2020 £'000
Carrying amount of non controlling interests acquired	1,335	1,335
Consideration paid to non controlling interests		
- Equity consideration	1,438	1,438
Cash consideration	3,155	1,363
(Deficit)/excess of consideration paid recognised in the transactions with non-controlling interests reserve within equity	**(258)**	**1,534**

Notes to the financial statements continued

For the year ended 31 December 2021

32. Related party transactions

The Group purchased services during the year from Newport Wafer Fab Limited totalling £75,504 (2020: £69,212) and at the year end had an outstanding payable of £15,101 (2020: £nil) due to Newport Wafer Fab Limited. Newport Wafer Fab Limited is wholly owned by Neptune 6 Limited. Dr AW Nelson was a director of Neptune 6 Limited and in conjunction with his close family Dr AW Nelson owned a controlling interest in Neptune 6 Limited up until 5 July 2021 when he ceased to be a person with significant control and his appointment as a director of Neptune 6 Limited was terminated.

Group

Transactions with Joint Venture - Compound Semiconductor Centre Limited

CSC was established by the Group and its joint venture partner as a centre of excellence for the development and commercialisation of advanced compound semiconductor wafer products in Europe. On its formation the Group contributed assets to the joint venture valued at £12,000,000 as part of its initial investment.

The activities of CSC include research and development into advanced compound semiconductor wafer products, the provision of contract manufacturing services for compound semiconductor wafers to certain subsidiaries within the IQE plc Group and the provision of compound semiconductor manufacturing services to other third parties.

CSC operates from its manufacturing facilities in Cardiff, United Kingdom and leases certain additional administrative building space from the Group. During the year the CSC leased this space from the Group for £115,000 (2020: £115,000) and procured certain administrative support services from the Group for £235,000 (2020: £235,000). As part of the administrative support services provided to CSC the Group procured goods and services, recharged to CSC at cost, totalling £3,881,648 (2020: £3,740,282).

CSC entered into an agreement with the Group following its formation which has been extended in the current year and conveys to the Group the right to use the assets of the joint venture for a minimum period up to 31 March 2023. Costs associated with the right to use the CSC's assets are treated by the Group as operating lease costs (see note 3a). Costs are charged by the CSC at a price that reflects the CSC's cash cost of production (including direct labour, materials and site costs) but excludes any related depreciation or amortisation of the CSC's property, plant and equipment and intangible assets respectively under the terms of the joint venture agreement between the parties. Costs associated with the right to use the CSC's assets totalled £6,234,000 (2020: £6,365,000) in the year.

CSC sold property, plant and equipment to the Group during the year for £nil (2020: £1,423,750). The purchase price was based upon an independent valuation performed by Liquidity Services UK with the consideration settled in cash.

At 31 December 2021 an amount of £1,030,000 (2020: £322,000 owed from) was owed from the CSC at year end.

In the Group's balance sheet 'A' Preference Shares with a nominal value of £8,800,000 (2020: £8,800,000) are included in financial assets at an amortised cost of £nil (2020: £nil) and the Group has a shareholder loan of £241,000 (2020: £241,000) due from CSC.

Company

Transactions with Group Companies

2021	Income £'000	Expense £'000	Trade Receivable £'000	Trade Payable £'000	Loan Receivable £'000	Loan Payable £'000
IQE (Europe) Limited	627	(66)	767	(8)	4,403	
IQE Silicon Compounds Limited	1,007		1,124		28,502	
Wafer Technology Limited	271	(33)	389	(19)		(8,319)
IQE USA Inc					8,550	
IQE Inc	819	(2)	970	(2)	103,386	
IQE KC LLC	938		1,049			(5,582)
IQE RF LLC					520	
KTC Wireless LLC			-			(16,623)
Galaxy Compound Semiconductors Inc	139		144			(6,753)
IQE Taiwan ROC	1	(11)	20			
MBE Technology Pte Ltd	22		54		11,611	
CSDC Private Limited		(2,938)				

2020	Income £'000	Expense £'000	Trade Receivable £'000	Trade Payable £'000	Loan Receivable £'000	Loan Payable £'000
IQE (Europe) Limited	513	(100)	538		11,700	
IQE Silicon Compounds Limited	738		1,122		23,115	
Wafer Technology Limited	205	(15)	349			(4,866)
IQE USA Inc					8,134	
IQE Inc	557	(92)	717	(5)	95,858	
IQE KC LLC	982		933		1,736	
IQE RF LLC					494	
KTC Wireless LLC						(15,973)
Galaxy Compound Semiconductors Inc	102					(6,102)
IQE Taiwan ROC		(11)	118			
MBE Technology Pte Ltd	13		17		9,503	
CSDC Private Limited		(936)				

33. Commitments

The Group had capital commitments at 31 December 2021 of £780,000 (2020: £nil).

34. Post balance sheet events

On 23 March 2022 the group announced to senior management the discontinuance of its nanoimprint lithography operations located in Taiwan. The cessation of nanoimprint lithography activities is expected to result in restructuring cash costs that are currently being assessed and the impairment of intangible technology development cost assets of £3,330,000. Technology assets developed prior to the cessation of activities will be retained by the Group.

Financial Statements

Glossary

APD	Avalanche Photodiode. A high performance detector used for high speed communication systems
Artificial Intelligence (AI)	A simulation of human intelligence in machines, including machines which are programmed to mimic human action or exhibit human-like traits such as learning or problem solving
Augmented Reality (AR)	A technology that superimposes a computer-generated image on a user's view of the real world to provide a composite view
BiHEMT	A device that integrates a PHEMT and HBT into the same structure in order to reduce device footprint, commonly used in RF systems such as mobile handsets
Compound semiconductor	A semiconductor formed from more than one element, typically comprising a mixture of elements from Groups III and V of the Periodic Table
Cloud computing	A network of remote servers hosted on the internet to store, manage and process data
CMOS++	Compound materials on Silicon
cREO™	Crystalline Rare Earth Oxide. This is a novel material developed by IQE for next generation filter and GaN applications
CVD	Chemical Vapour Deposition. IQE's technique for making Advanced Silicon/Group IV epi wafers, characterised by using compound sources (typically hydrides) flowed across a hot wafer where they are "cracked" (reacted) to get the desired material. CVD occurs in a similar pressure regime to MOCVD
Device structure	The term used to describe the particular series of epitaxial layers on a substrate crystal. They are typically specified by their thickness, composition, electrical and opto-electronic properties
DFB Laser	Distributed Feedback Laser. An EEL where a grating is integrated into the layer stack to improve performance, commonly used in high speed communication systems
Dilute Nitride	A material where small amounts of Nitrogen are added to GaAs in order to enable GaAs to be used in applications typically reserved for InP
EEL	Edge Emitting Laser. A laser characterised by an elliptical light beam emitting from the edge of the wafer, often used in high speed communication systems
Epitaxy (epitaxial growth)	Deposition of high quality, crystalline layers on a substrate. By specifically choosing the composition and sequence of the layers in epitaxial growth, the optical and electrical properties of the epi wafer are able to be tuned and these individual layers are referred to as 'epi layers'
Epi wafer or epitaxial wafer	The term used to describe the substrate crystal with epitaxial layers deposited thereon (see also ("wafer"))
GaAs	Gallium Arsenide
GaN	Gallium Nitride
GaSb	Gallium Antimonide
Ge	Germanium
HBT	Heterojunction Bipolar Transistor, a commonly used device for power amplification in mobile handsets
InP	Indium Phosphide
Integrated circuit	A combination of electronic devices integrated onto a single substrate or chip
Internet of Things (IoT)	Network of physical objects – "things" – which are able to collect and transfer data over a wireless network without human intervention
IQep Mo™	A template technology developed by IQE for RF filters and other applications requiring low resistance buried electrodes
IQGeVCSEL 150™	A technology developed by IQE for 6" VCSELs on Germanium
IQDN VCSEL	A technology developed by IQE for the growth of long wavelength (> 1300 nm) VCSELs on GaAs substrates
IR	Infrared
LiDAR	Light detection and ranging – a method for measuring distances by illuminating the target with a laser light
MBE	Molecular Beam Epitaxy. One of IQE's primary techniques for making compound semiconductor epi wafers, characterised by deposition using elemental sources impinging on a hot wafer where a reaction occurs to get the desired material. MBE occurs at extremely low pressures (known as ultra high vacuum) that are comparable to that of outer space
MIMO	Multiple-input, multiple-output. Two or more transmitting or receiving antennas are used on a wireless device to optimise the speed, range and reliability of that device
MOCVD	Metal Organic Chemical Vapour Deposition. One of IQE's primary techniques for making compound semiconductor epi wafers characterised by deposition using compound sources (typically metal organics and hydrides) that are flowed across a hot wafer where they are "cracked" (reacted) to get the desired material. MOVCD occurs at much higher pressures than MBE and also goes by the name MOVPE (Metal Organic Vapour Phase Epitaxy)
Nano Imprint Lithography (NIL)	A method of wafer patterning that allows cost effective, mass production of very small feature sizes
OEM	Original equipment manufacturer
Opto-electronic device	A device or structure in which light and electricity interact to produce, detect or manipulate light
PIN	A detector used in high speed communication systems

PHEMT	Pseudomorphic High Electron Mobility Transistor. A commonly used device for high speed switching for wireless communications
PQC	Photonic Quasi-crystal. A unique technology owned by IQE that enables beam steering capabilities for advanced optical products
Reactor	The equipment used to produce epitaxial layers on a substrate
RF	Radio frequency
Semiconductor	A material with resistivity which lies somewhere between that of a conductor and an insulator
Si	Silicon
SiC	Silicon Carbide
Structured light scanner	A 3D scanning device which measures an object using projected light patterns and a camera system
Substrate	The term used to describe the base wafer used for the epitaxial substrate crystal growth process
Time of Flight (ToF) camera	A camera which calculates the distance between the subject by measuring the trip time of an artificial light signal emitted by a laser or LED
VCSEL	Vertical Cavity Surface Emitting Laser, an opto-electronic component used in a variety of applications
Wafer	The term used to describe the substrate crystal in the form of thinly sliced discs or the substrate disc with one or more epitaxial layers deposited upon it
3D Sensing	Three dimensional depth sensing technology which is enabled by IQE's VCSELs
5G	5th generation mobile networks designed to provide enhanced connectivity and higher speeds

Financial Statements

Investor information

Registered Office
Pascal Close
St Mellons
Cardiff CF3 0LW
United Kingdom

Investor Relations
Amy Barlow
Phone: +44 (0)2920 839 400
investors@iqep.com

Principal Bankers
HSBC Bank Plc
8 Canada Square
London E14 5HQ

Auditors
KPMG LLP
3 Assembly Square
Britannia Quay
Cardiff CF10 4AX

Nominated Advisers and Brokers

NOMAD and Joint Broker

Peel Hunt LLP
7th Floor
100 Liverpool Street
London EC2M 2AT

Joint Broker

Citigroup Global Markets Limited
33 Canada Square
Canary Wharf
London E14 5LB

Registrar
Equiniti
Aspect House
Spencer Road
Lancing
West Sussex BN99 6DA

Financial Public Relations
Headland Consultancy
Cannon Green,
1 Suffolk Lane
London EC4R 0AX
iqe@headlandconsultancy.com

Share price information
Exchange: London Stock Exchange FTSE AIM Index
Ticker: IQE:LN
ISIN: GB0009619924

Share price performance
as at 31 December 2021
Earnings/loss per share: (3.87p)

MIX
Paper | Supporting responsible forestry
FSC™ C014531
www.fsc.org

Designed and produced by emperor
Visit us at emperor.works