HeiQ PLC
Annual Report and Accounts 2021

Differentiate.
Innovate.

SWISS
TECH
INSIDE

Who we are

Headquartered in Switzerland, HeiQ is an IP creator and established global brand in materials and textile innovation, adding hygiene, comfort, protection and sustainability to the products we use every day. To date, HeiQ has created some of the most effective, durable, and high-performance technologies in applications including functional textiles, medical devices, hospital hygiene, antimicrobial plastics, conductive coatings, graphene membranes, probiotic household cleaners and personal care.

Our purpose

To improve lives by innovating the materials people use every day.

Our vision

Heiqed materials that improve the lives of billions.

Our mission

To pioneer differentiating materials through co-creation.

SWISS
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INSIDE

2021 highlights

Operational

- Completed three complementary acquisitions, broadening our bio-based hygiene product offering and giving access to multiple high growth markets and industries:
  - Integration supported through new enterprise resource planning (ERP) and customer relationship management (CRM) systems to synergize the processes of 19 HeiQ Group entities.
  - Extended the salesforce by 21 employees, innovation by 36, marketing by eight hereby growing the workforce from 140+ people in 2020 to 200+ employees at the end of 2021.
  - Expanded HeiQ Portugal to form a group service center for finance, marketing and IT.
- Launched HeiQ AeoniQ, a climate positive fiber with an implied valuation of US$200m following investments from HUGO BOSS and The LYCRA Company.
- Launched 21 new products to market, filed five new patents and designs.

Financial

Revenue | US$m

+15%

2021	57.9
2020	50.4
2019	28.0

Gross margin | %

-9.2ppt

2021	46.6
2020 (restated)	55.8
2019	48.6

EBITDA (Adjusted)* | US$m

-54%

2021	6.5
2020 (restated)	14.1
2019	2.9

*see page 43 for calculation

Income after taxation | US$m

-51%

2021	2.5
2020 (restated)	5.0
2019	0.7

Contents

HeiQ is an innovator with a unique methodology for IP co-creation of disruptive technology, specialty materials manufacturing and value-adding consumer branding. HeiQ provides material innovations to over 300 leading global brands.

What we do

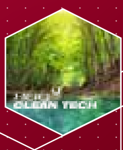
We offer technologies

in four main functions to customers and consumers, and deliver them in four forms (our "4x4" approach).

- Hygiene
- Comfort
- Protection
- Resource Efficiency

.01 Functional ingredients

- Specialty chemicals
- Industrial biotech

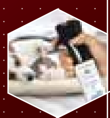


.02 Functional Materials

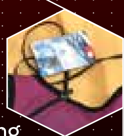
- Textile
- Coating
- Masterbatch
- Membrane

.03 Functional Consumer Goods

- Healthcare
- Personal care
- Lifestyle products



.04 Services



- IP/Brand licensing
- Innovation and testing services
- Regulatory and technical support

Who we work with

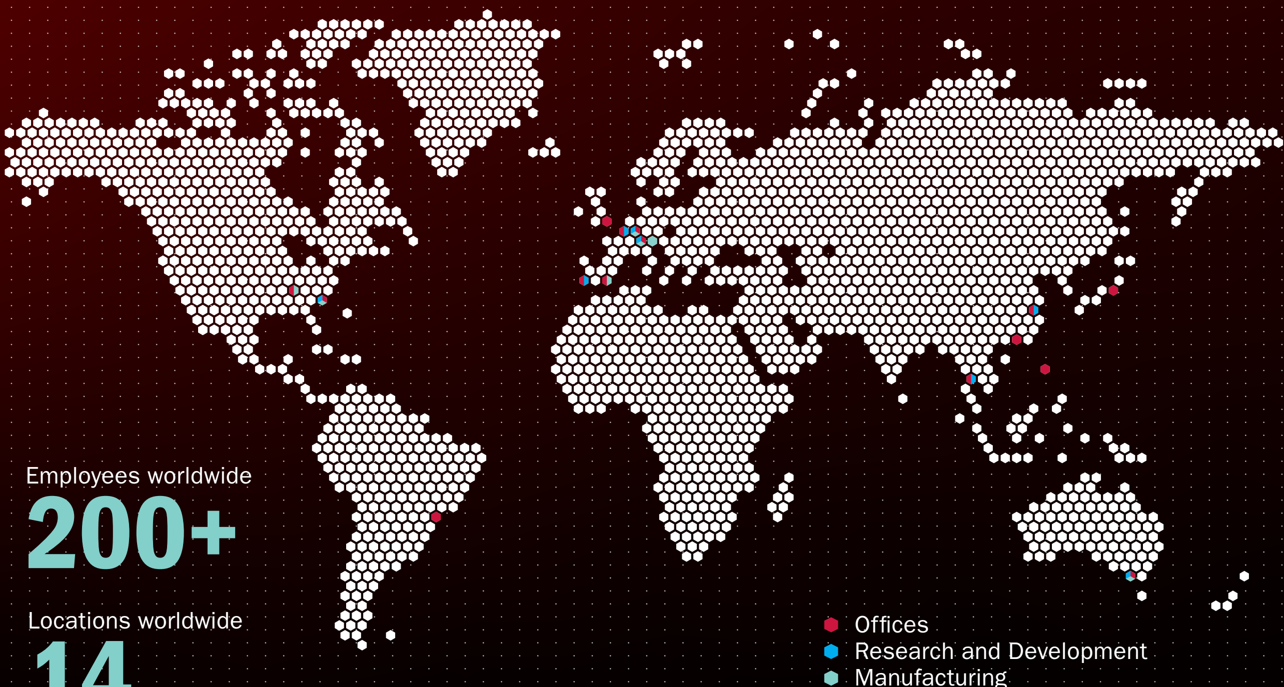
During our 17-year history, we have built long-standing relationships with clients all over the world and secured an established position in the textile sector. In recent years we have expanded our offerings to other industries to also address material innovations in healthcare, water treatment, industrial laundry, detergents, paints and coatings, plastics and packaging. To date, we have partnered with over 300 major brands and worked with them to develop many of our 200+ technologies.

Our global brand partners include:

BURBERRY, GAP, MOHAWK INDUSTRIES, INC., Serta Simmons Bedding, speedo, HUGO BOSS, BOSCH SIEMENS, ICP, THE NORTH FACE, ZARA, LYCRA

Where we operate

Including our most recent acquisitions in 2021, we employ over 200 people, based in 14 offices, eight R&D hubs and seven manufacturing facilities around the world. Over 20 distributors complete our global presence to serve over 50 countries.



Employees worldwide
200+

Locations worldwide
14

Our history + Our future.

HeiQ has a track record of delivering organic growth and our innovation strategy is creating a pipeline of exciting value accretive opportunities.

2005
Company founded
HeiQ was founded on March 21, 2005 with a CHF 1.6 million seed round by founders and friends.

2010
Series B
We raised CHF 11.1 million from Credit Suisse, Zürcher Kantonalbank, Onelife and 30 additional investors in a further up-round transaction to prepare for the development of HeiQ Australia and create additional technology platforms.

2008
First recurring customers, acquisition Tex-A-Tec and Series A
We gained our first recurring customer, Odlo, in January 2008 and raised CHF 6.4 million from Zürcher Kantonalbank and 20 additional investors to complete our first acquisition of Tex-A-Tec in an up-round transaction that closed ten days after Lehman Brothers filed for bankruptcy and started a global financial crisis.

2017
Acquisition of ChemTex and Series C
The acquisition of USA-based Chemtex Laboratories, Inc. doubled the size of the Company and enabled us to enter the world of mass manufacturing with capacity of 30,000 metric tons. We raised CHF 4 million from strategic investor Kemin Industries (a US$1 billion US chemical company) and an additional ten investors.

2019
Global expansion
Our global footprint grew with the establishment of HeiQ Portugal, HeiQ Shanghai and HeiQ Taiwan, as well as entering relationships with 12 new distributors.

HeiQ, pronounced [haikju] stands for the "hike" on which we came up with the HeiQ idea. It also stands for high-quality materials and for IQ.

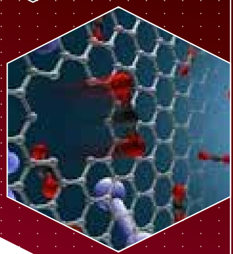
2020
Initial Public Offering (IPO)
We achieved a long-time ambition to go public by listing on the LSE's main market in December 2020 via a reverse takeover of Auctus Growth Plc and a GBP 20 million capital raise.

Looking ahead we have significant progress in major innovation projects.

Our future

We are excellently positioned to continue delivering on our growth with our extensive IP, a full R&D pipeline of over 100 projects including three major innovative projects.

More on the business cases on P.20-27



2021

Three acquisitions to broaden hygiene product offering and enter new markets and industries

Our footprint grew further with the addition of HeiQ Chrisal (Belgium), HeiQ RAS (Germany) and HeiQ Life (Hong Kong, Thailand and Brazil).

Innovator Differentiator.

HeiQ has built a reputation as a company with rich intellectual capital. We have a track record of world-leading global research, development, manufacturing, marketing and sales; strong environmental, social and governance (ESG) credentials; and an established presence in multiple high-growth markets.

Financial track record

We are a cash-generative business and have been profitable since 2010. We are in a high margin business with a healthy balance sheet and a strong cash position (US$14.6m) to fund our growth initiatives. As a lean and agile innovator we have a track record of shareholder value creation: US$55m raised since inception versus a current market capitalization of US$135m (March 31, 2022) market cap.

Shareholder value creation track record:

$55m raised

$135m market cap

Defined growth vision

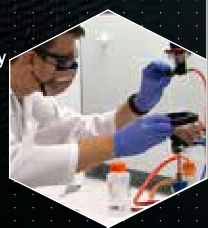
Our medium-term strategy is to grow annual revenues from US$58m to US$300m. Organic growth across our existing core products in existing and new markets allows us to be cash generative, enabling substantial investment in the advancement of our disruptive technology platforms and their commercialization. As such, we are targeting organic growth of 20% across our existing products in the next year.

Grow annual revenues from $58m to

$300m

Intellectual property

Our seven technology platforms and substantial IP and regulatory permits create strong barriers to entry for competitors. Our technologies, products, process methods and materials are protected by 11 patent families with two more pending and over 200 trademarks. Besides commercialization of our own IP, we increasingly engage in patent and trademark licensing to technology partners and industry peers. We have a culture of rapid and deep innovation, reflected in a strong R&D pipeline.



Strong brand equity enabling royalty and licensing revenue model.

Experienced, diverse and committed leadership team

Our founders – Group CEO Carlo Centonze and Chief Science Officer Dr. Murray Height – have an impressive track record of creating innovations, successfully marketing them and generating value for stakeholders. Carlo Centonze as Group CEO is leading a fast-growing team, supported by a diverse and knowledgeable global leadership, an experienced Board of Directors, and an Innovation Advisory Board with leading experts in strategically important fields of expertise. The founders and leadership team hold about 23% of HeiQ shares.

Expanding our hygiene range

Thanks to three strategic acquisitions in 2021, we have complemented our hygiene technology offering with probiotic, bio-based and botanical solutions. The acquisitions have given us the strongest and most sustainable product range in the specialty hygiene ingredients industry, further complemented our geographical footprint and have enabled us to access several new markets.

High growth markets

HeiQ's six focus markets

Ingredient IP creator for six markets

1. Textile chemicals, **$28bn, CAGR 4.6%**[1]
2. Man-made fibers, **$135bn, CAGR 3.5%**[2]
3. Paints & coatings, **$200bn, CAGR 5.4%**[3]
4. Antimicrobial plastics, **$37bn, CAGR 10.1%**[4]
5. Probiotics, **$53bn, CAGR 6.8%**[5]
6. Hospital & household cleaners, **$55bn, CAGR 5.2%**[6]

High-tech, high growth segment

1. Textile chemicals, **$1bn**
2. Man-made fibers, **$2.9bn**
3. Paints & coatings, **$0.5bn**
4. Antimicrobial plastics, **$1bn**
5. Probiotics, **$0.5bn**
6. Hospital & household cleaners, **$1bn**

$6.9bn[7]

Total addressable market

1,2,3,4,5,6 Statista.

7 Management estimate.

Strong innovation

Our aim is to achieve market differentiation through rapid and deep innovation, built upon our seven technology platforms. To date, we have developed over 200 technologies, many in partnership with major brands. We have a substantial R&D pipeline, focused on three potentially disruptive blockbuster innovations and several balancing medium or small projects.

HeiQ's seven technology platforms:

- Bio-polymer fiber extrusion (HeiQ AeoniQ)
- Synbiotic (Pre- + Pro-biotic) bio-tech (HeiQ Synbio)
- Chemical vapour deposition (CVD) (HeiQ GrapheneX)
- Nanomaterial synthesis and flame spray pyrolysis (FSP) (HeiQ ECOS)
- Physical vapour deposition (PVD) (HeiQ XReflex)
- Bio- materials synthesis & processing
- Emulsion, dispersion and formulation

See case studies on P.23, 25 and 27.

Strengthening our foundations.

Esther Dale-Kolb
Chair

2021 was a year of continuous progress and consolidation for the Group. HeiQ's growth platform has significantly strengthened and enhanced with three major acquisitions of Chrisal, RAS and Life during the period.

The complementary product portfolios of these three newly acquired entities have expanded our capabilities, expertise and product offerings in hygiene specialities and provided us access to new applications and markets. Having an established culture of innovation in their DNA, these businesses have been integrated into HeiQ within a very short space of time.

Another highlight was the launch of our disruptive HeiQ AeoniQ technology, a high-performance climate positive cellulose yarn with potentially revolutionary environmental benefits and we had brand partners such as HUGO BOSS and The LYCRA Company investing into the scale-up to realize the enormous potential of this game-changing technology together.

While achieving these value adding milestones, we also had to overcome significant challenges presented by the COVID-19 pandemic. We have faced constraints in the form of much longer lead times through all global raw material supply chains, production shutdown due to lockdowns of our customers and up to 500% higher logistics costs, as well as longer delivery times of products to our customers. Nevertheless, with the determination and adaptability of our team, we have been able to maintain supply to our customers, although at higher cost. My special thanks go to our customers, suppliers and distribution partners for their ongoing support of HeiQ in a highly challenging environment.

Broadening our hygiene technology solutions offering

HeiQ has earned its place as an innovator among lifestyle brands and as a leader in multiple textile functionalities. In recent years, we have been growing our reputation as the leader in providing hygiene solutions, not only for textiles but also for coatings, plastics, hospital cleaning products, industrial water treatment and consumer goods. A much higher awareness of hygiene and ongoing consumer demand for hygiene solutions continue to drive our offering in this space. With studies suggesting that by 2050 there will be an estimated 10 million deaths per year due to antimicrobial resistance[8], HeiQ has the mission to introduce our effective and sustainable hygiene solutions to market. Our strategic entrance into the medical mask business in the previous years, which contributed to about 10% of our business, is now giving us access to customers for our new hygiene offerings and a much bigger and sustainable annual revenue potential.

People and sustainability

During 2021 we made substantial investments into our workforce and increased our personnel by about 50% to create a stronger global organization capable of growing our innovation product range, market share and geographical footprint.

Today we are a truly global and diverse organization with more than 200 HeiQans spanning 29 nationalities, working across 19 legal entities. Having adopted flexible working arrangements, our highly motivated, professional and agile teams are accustomed to and skilled at working and interacting with our customers both online and offline, irrespective of time zones.

Sustainability is at the core of everything we do and it has been a driving force for HeiQ since day one. We made substantial progress in 2021 by collecting carbon emissions data at the Group level which will enable us to set carbon reduction targets. We deployed our expertise into market technologies with a launch of HeiQ AeoniQ with its tremendous downstream ESG potential. We conducted a survey of our employees and customers to learn about which ESG areas they want us to focus on.

Dividend

In order to continue to prioritize investment in our disruptive technology growth opportunities such as HeiQ AeoniQ, HeiQ GrapheneX and HeiQ Synbio, the Board has decided not to pay a dividend for the year 2021.

Board

In addition to completing these three acquisitions, during the period, the Board's focus was on delivering HeiQ's strategy to create clear management structures, workflows and scalability. The Board is committed to the principles which underpin good corporate governance and have revised and upgraded the corresponding policies and processes in place.

> *HeiQ has the drive and the culture to succeed.*

Outlook

HeiQ is well positioned for the future. We are an agile, nimble, responsive and dynamic business, with several very relevant technology propositions, ever growing ESG credentials, increasingly strong brand equity and established positions in high-growth markets. Having first movers' advantage, we have a strong sense of upcoming consumer trends and the ability to quickly respond to those trends and develop the technologies that will be in high demand in a few years' time. We enjoy the trust of our customers thanks to our track record of being a true innovator and differentiator.

We have a rich R&D pipeline with high commercial potential and we are opening doors to many exciting new markets. As we continue to integrate our acquisitions and leverage our capabilities, we will proactively seek to increase our penetration in these new markets.

I would like to convey my sincere thanks to our amazing HeiQ team for their highly motivated engagement during 2021.

Our goals for 2022 are ambitious and although times remain uncertain and may continue to be challenging, HeiQ has the strong foundation, growth strategy, drive and innovative culture to succeed in achieving its goals. I am confident that we will continue to grow as a key innovation player in multiple industries.

Esther Dale-Kolb
Chair

8 The Review on Antimicrobial Resistance, Chaired by Jim O'Neill, 2014.

Innovations, growing markets + customer base.

Our technology solutions are created in response to megatrends and market needs from our brand clients. We develop science-based solutions to address them swiftly.

Anticipating future needs brought by global megatrends
A number of global, long-term trends are having a major impact on the planet. These sustainability challenges are driving change in both manufacturing processes and product development in the markets in which we operate, giving us the opportunity to contribute and bring enhanced sustainability downstream.

.01 Growing, urbanizing and migrating global population

Technological advancements and economic prosperity have enabled improvements in medicine, sanitation, food production and living conditions, resulting in lower mortality rates and a rapidly growing global population.

This growth has led to more people migrating to towns and cities in pursuit of increased quality of life, with cities and urban areas now home to over half of the world's population. This influx places huge strain on infrastructure such as transportation, sewage, housing and utilities in a limited space.

Population growth and urbanization result in increased pollution and hygiene needs, meaning a greater requirement for sustainable and more effective technologies to mitigate these risks. Increasing population densities also pose greater threats of disease while the excessive usage of disinfectants contribute to increasing antimicrobial resistance, these all put substantial emphasis on effective but sustainable surface and air hygiene technologies such as HeiQ Synbio.

.02 Climate change and environmental degradation

The negative implications of earth's rising temperatures, increased CO_2 levels and biodiversity loss are profound. The scientific community has clearly stated the urgent need to keep global warming below a 1.5˚C increase to preserve stable living conditions. Despite this, emissions continue to rise, species become endangered and deforestation continues.

The detrimental effects of climate change include rising sea levels, extreme weather events and habitat loss, and will inevitably lead to resource scarcity and social and political unrest, leading to migrations. Often the poorest in society are most severely impacted by these environmental changes, meaning the developed world has a heightened responsibility to address its production and consumption habits and the wider implications of these for poorer communities.

Microplastic pollution to our oceans is a major issue and there is an urgent need to mitigate our damage to the marine ecosystem, which is responsible for half of this world's annual CO_2 absorption. According to the Ellen MacArthur Foundation[9] and the World Economic Forum, by 2050 there will be more plastics than fish in our oceans. And synthetic textiles are a key contributing industry already responsible for over 30% of all oceanic microplastics.

9 The New Plastics Economy, Ellen MacArthur Foundation. 2016.

.03 Scarcity of and global competition for resources

Humanity uses approximately 1.6 planets' worth of resources to support its current activities and if drastic measures aren't taken, this is set to increase to two planets' worth by 2030. In short, we need to halve our current impact to ensure we are able to live within our planetary boundaries.

We are already seeing interconnected problems arising from the resource demands of a growing population coupled with the impact of climate change on resource availability. These two unstoppable forces mean competition for limited resources is fierce, and management and mitigation are vital to maintain a fair and balanced society and to avoid conflict.

The war in Ukraine, Europe's corn basket, capable of feeding 600 million people, exemplifies the challenges at a regional level.

Manufacturing products using recycled materials or waste and that are recyclable at the end of their usable life will preserve the raw material value throughout its lifecycle. Focusing on sustainable solutions for production practices will support the preservation of natural capital. Political intervention and global collaboration are essential to ensuring sustainable development and the creation of closed-loop economies and fair access to natural resources.

HeiQ's innovations provide sustainable solutions to negative impacts caused by megatrends

Acting as a translator and connector between academic research and market needs, we work with a global network of more than 30 academic partners and over 300 brands to understand how these megatrends are necessitating material and product innovation in terms of both process and output.

Our partners, direct customers and wider consumers are looking for two things from HeiQ: materials and products that allow them to minimize the negative impacts during manufacture and throughout the product's usable life, and modern functionality and performance of our technologies, which provide long-term sustainable benefits and even combat some of the effects of the trends outlined above.

We are determined to revolutionize the industries we serve with greener, increasingly bio-based technologies. A major development is HeiQ AeoniQ our climate-positive bio-cellulose yarn that has the potential to replace all polyester and nylon (see more on P.23).

The pandemic has increased awareness of how much exposure to pathogens people face in their daily lives and of the surfaces they come into contact with. This is driving increased market demand for products that deliver extra hygiene functionality and protection. That is why we have also broadened our offerings to include durable hygiene coatings for packaging, paints and products that help maintain surface hygiene.

The markets we operate in

As an innovator for novel materials and disruptive technologies, there is scope for our products to be used across many markets. We continue to consolidate our strong position in the textile industry and build up our coatings and medical device offer. New markets we will increasingly move into include, for instance, probiotics, through the acquisition of Chrisal NV in Q1 2021, technical filtration and in the near future, batteries and electronics with our advanced R&D project in regard to our disruptive porous graphene membrane technology (HeiQ GrapheneX). The magnitude of the markets we operate in is as follows:

Textile chemicals market

$28bn

in 2021 | **CAGR 4.6%**

Man-made-fibers market

$135bn

in 2021 | **CAGR 3.5%**

Paints & coatings market

$200bn

in 2021 | **CAGR 5.4%**

Antimicrobial plastics market

$37bn

in 2021 | **CAGR 10.1%**

Probiotics

$53bn

in 2021 | **CAGR 6.8%**

Hospital & household cleaners

$55bn

in 2021 | **CAGR 5.2%**

How we are responding to opportunities

Whether driven by a scientific development or a new consumer desire brought to us by a brand partner, we have the unique ability to respond to opportunities with rapid and deep innovation and turnkey solutions.

Sustainable manufacturing

We are responding to the need for more sustainable and efficient production by:

- Embracing circularity
- Improving process efficiency
- Increasing material efficiency
- Replacing dangerous goods with non-dangerous goods
- Replacing conventional ingredients with natural, bio-based and recycled alternatives
- Extending the useful lifetime of products by higher quality and less maintenance

Innovative and functional products

We are creating materials and products that:

- Allow for efficient production and help to reduce the environmental footprint of the manufacturing process
- Promote safety and wellbeing (microbial management, filtration, water treatment, thermoregulation)
- Are sustainable (recycled, recyclable, benign, durable)
- Help to reduce the footprint during the usable life of the products (clothes that require less washing, sheets that can be cleaned effectively with mild detergent and cold water, clothes that dry faster, hygienic surfaces that require less frequent cleaning, etc.)

Please refer to the Sustainability Report on P.30 for more.

Business model

Experience and capabilities across the value-chain and project lifecycle

When partnering with a brand or manufacturer, we distinguish ourselves from competitors by offering end-to-end solutions. When manufacturing finished goods that we market directly, we combine our experience and capabilities to ensure excellent product quality and effective communication to consumers.

What we do

We are unrivaled in our blend of products and services, bringing a unique range of strengths to each stage of the HeiQ R-D-M (Research-Development-Marketing) innovation process. There are three key elements to our partner offering:

.01 Scientific research

Our research is motivated by the opportunities we identify, or that our market partners bring to us. We address these following a three-step process.

Step 1: Define the issue and its components.

Step 2: For each component, develop a hypothesis and proof of concept with our research partner network comprising 30+ universities.

Step 3: Develop and assemble market-ready products with our internal development technical support and consumer validation teams.

The HeiQ difference

+20% of our employees are highly skilled scientists working in research and development; externally, we have an extensive network of academic research partners. Through our co-creation approach, we share and diversify the risk of exploratory research projects with our partners, and we have experience of navigating multiple global government funding processes.

.02 Specialty materials and ingredients manufacturing

After research and a successful proof of concept, an initial recipe or prototype is developed, refined and optimized to ensure it is scalable. The production protocol is documented and deployed to our production sites. Our robust manufacturing capacity also allows us to pursue large manufacturing projects in our industry.

The HeiQ difference

Our knowledge, facilities and IP enable us to manufacture ingredients, materials, consumer goods and medical devices in industrial volumes and bring to market at speed but with validation and quality control. We operate in markets that have medium to high barriers to entry, including increasingly complex regulatory, registration and compliance requirements.

.03 Consumer marketing and ingredient branding

We work with our partners to develop marketing narratives and communication strategies. We join launch events, write press releases and promote products, and provide training to our customers' sales organization on how to sell the added value of the innovation. By helping our ingredient brand customers' maximize the price premium and lowering their barrier to innovate, we foster innovation across our industries.

The HeiQ difference

We have a team of marketing and branding professionals with experience across a range of markets. We have strong knowledge and experience of consumer behavior and understand how to create branding materials that translate complex technical scientific knowledge into plain language suitable for consumers. We produce multimedia content and have expertise in all channels.

How we generate revenue

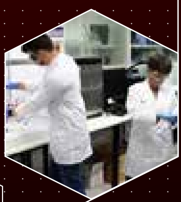
Our primary source of revenue is the production and sale of functional ingredients, materials and finished goods.

However, fees related to development/use of technology including licensing will become an additional growing contributor to our revenues.

Other sources of revenue include research and development services as well as laboratory work. Because of the highly differentiating nature of the products, we generally adopt a value-based pricing strategy.

After we develop a production protocol, we manufacture the functional ingredients, materials or products ourselves or selectively license the IP to other manufacturers for a licensee or franchisee fee.

Some research projects are financed through grant funding or directly by customers, either in the form of a research partnership, or by their purchases of existing (off-the-shelf) technology.



The value we create

Partners and customers
Our brand partners and direct customers benefit from access to our differentiating technologies. Our performance-enhancing materials improve their products. We provide end-to-end support and all the services required to bring innovations to market.

Consumers
Products featuring our technology offer tangible benefits for the end user, including innovative functionality, comfort, hygiene, protection and sustainability features.

Employees
Our employees have the chance to work and develop in a meritocratic and diverse environment, being challenged and supported to help the Company deliver on its purpose and make a difference for a better world.

Investors
HeiQ is in a robust financial position with a healthy balance sheet and diversified revenue. We have been cash generative for many years, and our investors benefit from the ongoing growth of our business and our willingness to create disruptive innovation.

Suppliers
We develop strong and trusted partnerships with our suppliers. Our growth and momentum will lead to increased spending on raw materials in innovative product applications.

Society
By helping many brands and consumers to reduce their impact on the environment, we are indirectly improving the lives of billions more. Through our engagement with university research partnerships, we play a role in fostering the education of new generations of scientists, engineers and entrepreneurs.

Accelerating towards our ambitions.

Carlo Centonze
CEO

Following a momentous 2020, we made strong progress in accelerating HeiQ towards its strategic objectives throughout 2021. We completed three transformative acquisitions in six months and significantly expanded our capabilities and team growing from 140 to more than 200 HeiQans (+20 sales and +30 Innovation). We launched our disruptive HeiQ AeoniQ climate positive yarn, securing investment from our first commercialization partners, and made strong progress with our HeiQ GrapheneX and HeiQ Synbio blockbuster technologies. In many ways, 2021 reminded me a lot of the exhilaration I experienced during take off accelerations in my service as a Swiss army pilot.

We achieved topline growth despite having faced our strongest ever headwinds in the form of supply chain disruptions and lockdowns, demonstrating the strong continued demand for our IP. Having said that, our gross margin has been temporarily impacted by these factors. Now Europe is being rocked by the war in Ukraine, with as yet unknown consequences for the oil price, food availability, supply and logistics. We managed to overcome the challenges of 2021 thanks to an extremely agile and resilient team and an outstanding commitment by each and every HeiQan. I would like to thank them all and trust that with all hands on deck in 2022 we can ride any storm thrown at us again. As an ongoing measure, we have adjusted our prices wherever and as soon as possible to compensate the increased raw material and logistic costs, diversified our supplier base and invested in a global ERP to streamline our operations.

Our business is in a strong position to weather external pressures. In addition to our core products, we own seven technology platforms and have a healthy innovation pipeline. One of our platforms, our climate positive HeiQ AeoniQ fiber, received an implied valuation of US$200 million with investments from Hugo Boss and The LYCRA Company. A subsidiary holding the technology platform being valued more than our listed entity (as of March 2022) demonstrates the potential value of our IP.

With US$14.6 million cash, >US$9 million available credit lines and with only US$1.7 million of borrowings, our balance sheet gives us scope to act on the value creating opportunities in our pipeline. Our cash generative business (cashflow from operating activities) has financed our innovations since 2010, and with only US$55 million raised since inception in 2005 we have maintained a lean IP value creation approach.

Operational and financial performance

In 2021 the Group achieved record revenue of US$57.9 million. Our goal to generate revenues of US$300 million in the medium term has not changed.

Our business model is to grow organically, complemented by making selective capability building acquisitions, and commercializing or licensing our disruptive innovations.

Acquisitions of the complementary green hygiene IP platforms of Chrisal, RAS and Life have allowed us to become one of the top three hygiene specialities player with the most sustainable product range, giving us an entry into multiple new lucrative markets, beyond textiles. 2021 saw our brand equity grow exponentially once again. Our credentials as a green innovator are acknowledged by textile brands and increasingly by consumers too. This will allow us to maintain premium margins and deploy innovations with impact.

Our major contract wins with ICP in hygiene paper coatings and our acquisition of RAS with durable hard surface hygiene coatings have led to the creation of our new Coatings & Plastics business unit, which includes a low eEmissivity technology platform "ECOS" with the potential to grow into our fourth blockbuster technology for defence, building and automotive markets.

People and sustainability

HeiQ remains a nimble and agile company, with the potential to make a significant positive environmental impact through our work with large retail brands to create technology solutions that make their downstream products more sustainable. HeiQ AeoniQ is a prime example of this.

Being sustainable is core to our ethos, as well as a source of competitive advantage. Sustainable alternatives capable of disrupting existing markets are a key opportunity for the Group, including:

- natural vs. oil based polymers
- bio-based vs. quarternary ammonium salt based actives
- botanical technologies vs. metals
- probiotic bacteria vs. chemical biocides and disinfectants.

From New Zealand to Colorado, today over

+200 HeiQans

work closely and around the clock to innovate and differentiate in order to

improve the lives of billions of people.

Chief Executive Officer's Review continued

The megatrend tailwinds undoubtedly favor HeiQ's offerings. Combined with our existing progress and momentum, the outlook for the Group and our stakeholders is bright.

Sustainability progress summary

With the expansion of our team this year, we achieved a new level of diversity. With 29 nationalities now represented across HeiQ, our shared values and mission are more important than ever. Our inclusive culture and flat hierarchy are vital for fostering idea exchange, particularly important for an innovative business known for our speed to market. Despite a competitive job market, we have still managed to bring in some exciting talent.

Current trading and outlook

Having laid a strong foundation with our acquisitions and innovation, we have ambitious plans and will continue to stay one step ahead.

Organic growth across our products in existing and new markets allows us to be cash generative, enabling substantial investment in the advancement of our disruptive technology platforms and their commercialization or royalty licensing. As such, we are targeting double-digit organic growth across our existing products in the next year.

We have a tremendous opportunity for value creation with HeiQ AeoniQ, HeiQ GrapheneX and HeiQ Synbio. We will continue to invest in the commercialization of AeoniQ, including building a US$5 million pilot commercialization plant and launching it to market with a dozen brand partners. We will also invest in a US$2 million pilot commercialization plant for our GrapheneX membrane technology and aim to secure a JDA with leading battery and rugged electronics players. With the recently published paradigm shifting study by the Charité hospital in Berlin on HeiQ Synbio we will push for strong claims approval and commercialization to healthcare globally.

The complementary skillsets and locations of our businesses will allow us to disrupt new markets and deploy our technologies globally. But we must remain lean and agile while growing, so another key goal is to strengthen our integration across all subsidiaries by harmonizing digital technologies and operating procedures. We will continue to prioritize attracting the talent we need to fuel our growth, transformation and innovation strategy, which we have been successful so far.

The megatrend tailwinds favor HeiQ's offerings. Combined with our existing progress and momentum, the outlook for the Group and our stakeholders is bright.

Carlo Centonze
CEO

Our strategy

Our growth strategy is built around five pillars, which will help us achieve our vision of delivering innovative materials that

improve the lives of billions.

Strategic pillar	Why we focus	Progress in 2021
.01 Growth markets	**Textiles** In the US$1.7 trillion textile industry, low margins are a major barrier to taking risks (innovating) and to change (new ways of doing things more sustainably). Our unique approach of innovation and differentiation is the key to overcoming this barrier and achieving above-average margins.	Launched six textile technologies, three in the comfort range and three in the protection range.
	Man-made fibers Polyester and nylon comprise over 60% of the 111 metric tons of annual textile produced. These synthetic fibers take 1,000 years to degrade and cause persistent pollution in our oceans, endangering marine ecosystems. We believe a new type of bio-based, eternally circular, climate-positive yarn will mitigate this urgent problem.	Launched HeiQ AeoniQ. As of March 2022, the technology platform had an implied valuation of US$200 million with HUGO BOSS and The LYCRA Company investing a combined US$10+ million in this technology.
	Coatings & Paints There is increasing awareness of pathogens on surfaces and demand for sustainable solutions to maintain surface hygiene. Paints and coatings are an efficient way to deliver functionality to a product, fixture or room without having to go through a value chain that involves numerous players.	Acquired HeiQ RAS with expertise in coatings and surface hygiene management technologies.
	Antimicrobial plastics High growth market (CAGR> 10%) following increased awareness and demand in hygiene as a consequence of the COVID-19 pandemic.	Acquired HeiQ Life with know-how in smart antimicrobial plastic ingredients and plant-based antimicrobial technologies.
	Probiotics and hospital & household cleaners Awareness is growing of using probiotics in non-digestive applications and there is high potential for growth in the next decade, especially in delivering hygiene benefits via personal care, household cleaners and professional cleaning products by protecting surfaces naturally.	Acquired HeiQ Chrisal with its Synbio patented technology platform and outstanding hospital infection preventing cleaner technology. Re-launched six products.

Strategic pillar	Why we focus	Progress in 2021
.02 Innovation	Innovation is the process of creating value by doing things differently. Innovation is the only way to become more sustainable.	Launched 21 products and announced disruptive HeiQ AeoniQ project.
.03 Differentiation	Our innovations benefit consumers and the planet, and we help our customers make sure that these benefits are well-understood by their consumers, so that our customers are able to charge a premium to consumers for the added value and therefore are willing to pay us for our innovations.	We have appeared in the press at least 13,749 times in 2021. This earned media exposure gives us the opportunity to be known by more consumers and potential customers.
.04 People and sustainability	Innovation requires high intellectual capacity and human capital, and we are only as good as our people. Sustainability is ingrained in our DNA and at the core for everything we do as a Group.	Started to collect carbon emissions data at the Group level, which will enable us to set reduction targets. We also carried out a survey of our employees and customers to learn more about which areas we should focus on.
.05 Digitalization	Digital improvements can lead to process efficiency, greater innovation and an enhanced customer experience.	Began implementation of a new ERP/CRM system to standardize operations across all our entities, improve work efficiency and reduce operational risks by automatizing many daily operation procedures.

Strategy in action

Health + Hygiene.

Case study

Strengthened hygiene offering with three successful acquisitions in 2021

The hygiene megatrend

The effect of the COVID-19 pandemic on consumer behavior is likely to endure. A McKinsey[10] study predicts there will be an ongoing consumer focus on health and hygiene. We believe that hygiene features on everyday products will become a key purchase driver.

Our hygiene business

Back in 2005, our first innovation focused on creating hygienic T-shirts that stay smelling fresh after prolonged wearing. The megatrend that favors natural, bio-based ingredients versus metal-based ones drove us to launch several bio-based textile technologies before the pandemic with global brands like GAP (Old Navy) and Burton being early adopters. The pandemic has caused demand for HeiQ Viroblock to surge in diverse industries. We seized the opportunity to enter these new markets to broaden the application of HeiQ Viroblock.

In 2021, we acquired three businesses, all with a strong technology profile in delivering hygiene functionality in materials used in diverse industries:

HeiQ Chrisal

- Biotech focusing on synbiotics for personal hygiene, household cleaning products and infection control for hospitals and healthcare facilities.

HeiQ RAS

- Experts in customer financed innovation projects and highly functional coatings to deliver hygiene benefits on different surfaces.

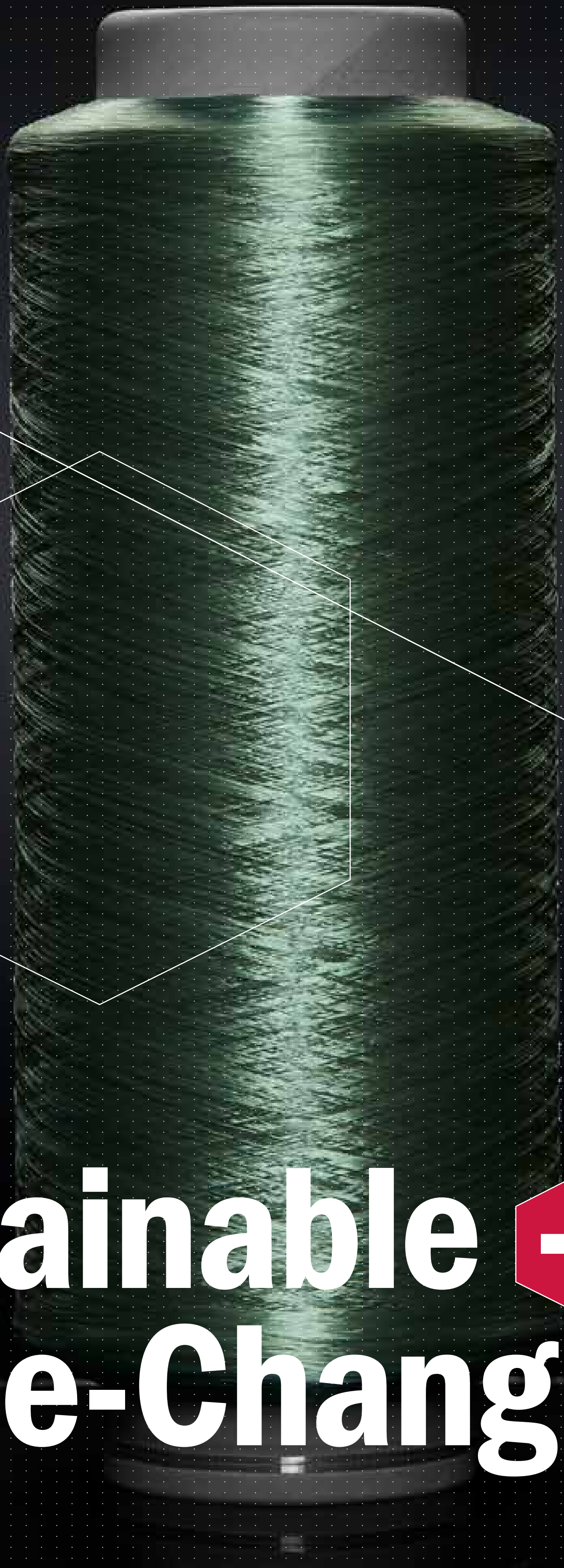
HeiQ Life

- With a strong portfolio of smart and plant-based antimicrobial ingredients and a customer base in plastics and healthcare surface hygiene markets.

These three acquisitions bring us new sustainable and bio-based hygiene tech platforms, boots on the ground in four more countries and customers in various new market sectors.

Carlo Centonze
HeiQ Co-founder and CEO

10 McKinsey & Company, How COVID-19 is changing consumer behavior – now and forever.



Sustainable + Game-Changing.

Case study

Potential game-changer for the textile industry: climate positive yarn HeiQ AeoniQ

Our drive to innovate

Textiles, a US$1.7 trillion market (Statista), is the second most polluting industry, responsible for an estimated +20% of global CO_2 emissions. Polyester and nylon make up over 60% of the global 111m metric tons of textile fiber consumption.

Polyester alone takes more than 1,000 years to fully degrade in landfill, and is responsible for ca. 30% of microplastics in the oceans and an estimated >7% of global CO_2 emissions.

HeiQ sets the aim to substitute polyester and nylon by a climate-positive, bio-based, biodegradable and eternally circular fiber in the textile industry.

Our innovation

HeiQ AeoniQ (Aeon – for eternal circularity) is an innovative high-performance cellulose filament yarn that has for the first time in textiles the potential to replace polyester and nylon.

- Made from waste, recycled or reactor grown cellulosic biopolymers that bind carbon (CO_2) from the atmosphere.
- For every ton of polyester substituted by HeiQ AeoniQ, up to +5 tons of CO_2 can be reduced.

The HeiQ AeoniQ process is the first that has complete flexibility with the cellulose feedstock. We are able to turn most common cellulose as well as that from recycled and waste stream sources into a high-performance yarn.

HeiQ AeoniQ is the first cellulosic yarn that has equivalent tensile characteristics to polyester and nylon yarns. This is achieved through a proprietary closed loop spinning process using environmentally friendly, 99.5% recycled process technology and 100% renewable process energy.

The final textile product can be recycled repeatedly without losing its performance. We are able to turn most common cellulose as well as that from recycled and waste stream sources into a high performance yarn.

Market potential

The global market for polyester and nylon is worth US$135 billion in 2020 (CAGR >3.5%) (Statista). We estimate our total addressable market to reach US$2.9 billion in the next five years.

Our progress to date

As of February 2022, only four months after we announced the project, we had on-boarded two global brands, The LYCRA Company and HUGO BOSS, with total financial commitments (subject to milestone achievements) exceeding US$10m.

Next milestone

We are building our pilot commercialization plant in Herzogenburg, Austria. The plant is scheduled to be operational in 2HY 2022.

We are currently validating the process scale-up to an industrial, mass manufacturing level and are planning our first giga factory with an annual capacity of 30,000 metric tons. The factory will be located in western Europe and is scheduled to be commissioned by the end of 2024. We estimate the plant will have the scope to generate more than US$200 million of revenue per year at high double digit gross margins.

“

By 2050, there will be more plastic than fish in our oceans.

Ellen MacArthur Foundation

“

HeiQ AeoniQ – a cellulose yarn rivaling polyester and polyamide (nylon), with a chunk of investment from Hugo Boss to advance their pilot production, plus exclusive distribution of the yarn through The LYCRA Company, which sounds like a valuable endorsement.

Forbes

“

The new material can be recycled repeatedly – an issue in the current clothing market, where less than 1% of clothes are recycled and the rest take up space in landfills.

Bloomberg

Pison, G., 2019. How many humans tomorrow?

Degradation Rates of Plastics in the Environment, Ali Chamas et. al. CS Sustainable Chem. Eng. 2020, 8, 9, 3494–3511, 2020.

European Environment Agency, 2021, Plastic in textiles: potentials for circularity and reduced environmental and climate impacts.

https://ellenmacarthurfoundation.org/the-new-plastics-economy-catalysing-action

Circular Fibres Initiative analysis; Ellen Mc Arthur Foundation, 2017.

Meaningfull brands 2021, Havas Group.

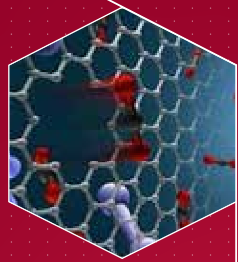
Li, T. et.al., 2021. Developing fibrillated cellulose as a sustainable technological material. Nature, 590(7844), pp.47-56.

Shen, L. and Patel, M.K., 2010. Life cycle assessment of man-made cellulose fibres. Lenzinger Berichte, 88, pp.1-59.

Technology + beyond.

Case study

HeiQ GrapheneX – highly porous graphene membranes for electronics, batteries and beyond



Our drive to innovate

Graphene is an atomically-thin, two-dimensional layer of carbon with unique properties, including exceptionally high strength, high conductivity, non-permeability, flexibility and chemical inertness. Permeable membrane materials are a critical feature in diverse filtration and separation applications that are essential to society and the environment. Membrane performance is determined by material strength, minimal permeation resistance to the substances being filtered and separated, and other material properties such as conductivity and wettability.

HeiQ aims to create an ultra-thin, extra-strong, fully-permeable and conductive porous graphene membrane material for use in applications such as batteries and filtration that enable positive global impact in resource efficiency, health and sustainability.

Our innovation

- HeiQ GrapheneX is a technology platform for producing porous graphene membranes. The intellectual property, initially co-developed with the Swiss Institute of Technology (ETH), has a strong foundation of three patent families spanning process, materials and applications. The technology features an innovative technique to directly introduce pores during graphene synthesis to produce membrane materials with manifold enhanced properties compared to conventional polymer membranes.
- Conventional lithium-ion batteries are fast approaching their capacity limits. Next-generation battery technologies are emerging to meet both the growing demand for electric energy and the demanding performance requirements of an expanding array of segments, including advanced drone and air mobility applications.
- Our porous graphene material used as electrodes for next-generation lithium metal batteries:
  - Enables lithium metal batteries capable of >50% higher energy density compared to conventional Li-ion batteries
  - Enables more stable and safer lithium metal batteries for longer cycle lifetimes
  - Enables lighter, more compact batteries (suitable for drones and air mobility)
  - Enables faster charging and discharging

Market potential

The global market for next-generation advanced batteries is projected to grow at a CAGR of ca. 80% to reach US$8.1 billion by the end of 2026. In addition to this battery market, HeiQ is also actively exploring benefits for HeiQ GrapheneX materials in other application areas such as electronics vents, water filtration, medical applications and waterproof, breathable textiles.

Our progress to date

HeiQ is moving to scale up and commercialize HeiQ GrapheneX technology with ongoing activities in three parallel operational areas: R&D, business development and manufacturing.

Next milestone

We are building a pilot commercialization plant to de-risk the technology scale-up, and are making promising progress in engaging with potential partners in key applications.

"We are actively exploring benefits of HeiQ GrapheneX materials in applications ranging from batteries, electronics vents, water filtration, medical applications and waterproof breathable textiles.

Dr. Murray Height
Group Chief Science Officer

Research and Markets (2021). Global Battery Market Report 2020-2027.

Allied Market Research (2020). Lithium-ion Battery Market by Component (Cathode, Anode, Electrolytic Solution, and Others), End-use Industry [Electrical & Electronics (Smartphones &Tablet/PC, UPS, and Others) and Automotive (Cars, Buses & Trucks; Scooters & Bikes; and Trains & Aircraft), and Industrial (Cranes & Forklift, Mining Equipment, and Smart Grid & Renewable Energy Storage): Global Opportunity Analysis and Industry Forecast, 2019–2027.

Markets and Markets. Unmanned Aerial Vehicle (UAV) Market by Point of Sale, Systems, Platform (Civil & Commercial, and Defense & Government), Function, End Use, Application, Type, Mode of Operation, MTOW, Range, and Region – Global Forecast to 2026.

Markets and Markets. Urban Air Mobility Market by Component (Infrastructure, Platform), Platform Operation (Piloted, Autonomous), Range (Intercity, Intracity), Platform Architecture, Unmanned Platform Systems, End User and Region – Global Forecast to 2030.

Market Research. Global Rugged Electronics Market to Reach $16.8 billion by 2027.

Solutions + development.

Case study

A potential solution to help end hospital associated infections (HAI) and development of antimicrobial resistance (AMR)

Our drive

- A continued rise in antimicrobial resistance by 2050 would lead to 10 million people dying every year and a reduction of 2% to 3.5% in Gross Domestic Product (GDP). It would cost the world up to US$100 trillion.
- Frequent use of disinfectants gives rise to multi-resistant bacteria (super bugs).
- World hygiene trends are focusing on sustainable and safe technologies that provide new benefits by harmonizing with nature and our own microbiomes.

Innovative solution

- Recent studies show that probiotic cleaning;
  - reduces AMR on hospital surfaces by up to 99.9%
  - reduces hospital surface pathogens by up to 90% more than disinfectants
  - reduces days of treatment with antibiotics by up to 86%
  - reduces drug consumption associated to HAI by 60% to 79%
  - reduces HAI associated costs by up to 75%
- The acquisition of HeiQ Chrisal has given us HeiQ Synbio, a synbiotic bio-tech platform, a topic with a substantial amount of clinical published data on curing and preventing the development of resistance (such as MRSA) and healthcare associated infections (HAI).

Market potential

- Hospital and household cleaners market size: US$55 billion, CAGR 5.2%
  - We believe this technology will be adopted widely in diverse sectors in the next decade, and aligns with the EU's Green Deal strategy.

Our progress to date

HeiQ Synbio is achieving promising results in scientific studies in fields including infection control, skin microbiome improvement, water treatment, allergen reduction and sustainable cleaning. Our surface cleaner range is sold to over 50 hospitals in Europe, with hospitals in the USA and China in early adoption stage. We have entered partnerships with strong players in diverse markets to help drive penetration of HeiQ technologies worldwide.

Next milestone

We are in the process of registering our Ecolabel professional cleaners for use in medical and healthcare settings. Following the paradigm shifting publication in "Clinical Microbiology and Infection (Klassert et al, 2022)" of a study done at the leading University Hospital Charité Berlin in Germany, we plan to drive adoption of this product line in many European healthcare facilities once the product's claims are fully registered.

For hygiene, personal care and infection control applications, the HeiQ Synbio technology has proven to be superior to all known disinfectant and cleaning technologies.

Dr. Robin Temmerman
CEO HeiQ Chrisal

The Review on Antimicrobial Resistance, Chaired by Jim O'Neill. December 2014.

Klassert, T. E. et al. Comparative analysis of surface sanitization protocols on the bacterial community structures in the hospital environment. Clin. Microbiol. Infect. 0, (2022).

Almatroudi, A. et al. Staphylococcus aureus dry-surface biofilms are not killed by sodium hypochlorite: implications for infection control. J. Hosp. Infect. 93, 263–270 (2016).

Caselli, E. Hygiene: microbial strategies to reduce pathogens and drug resistance in clinical settings. Microb. Biotechnol. 10, 1079–1083 (2017).

Caselli, E. et al. Impact of a probiotic-based hospital sanitation on antimicrobial resistance and HAI-associated antimicrobial consumption and costs: a multicenter study. Infect. Drug Resist. 12, 501–510 (2019).

Tarricone, R., Rognoni, C., Arnoldo, L., Mazzacane, S. & Caselli, E. A Probiotic-Based Sanitation System for the Reduction of Healthcare Associated Infections and Antimicrobial Resistances: A Budget Impact Analysis. Pathogens 9, 502 (2020).

Key Performance Indicators

We use a number of Key Performance Indicators (KPIs) to measure our performance over time. We select KPIs that demonstrate the financial and operational performance underpinning our strategic drivers.

.01 Finance

Revenue growth | US$m

2021 performance

+15%

Year	US$m
2021	57.9
2020	50.4
2019	28.0
2018	26.2

Why we measure
Sales growth is one of the most basic barometers of success for any business.

Gross Profit Margin | %

2021 performance

-9.2%

2021	46.6
2020 (restated)	55.8
2019	48.6
2018	42.8

Why we measure
This KPI gives insight into our operational profitability.

.02 Innovation

Number of new projects that made it into our R&D pipeline

2021 performance

22

2021	22
2020	12
2019	10
2018	7

Why we measure
We never run out of innovation ideas and there are countless opportunities to innovate. HeiQ's ability to qualify the ideas through "proof of concept" and market potential evaluation before bringing them into our R&D pipeline is key to ensuring we have the market in mind before investing excessively into a project.

Number of launched innovations

2021 performance

21

2021	21
2020	5
2019	3
2018	3

Why we measure
Innovations that are launched generate returns on our R&D investments.

.03 Differentiation

Total number of media mentions

2021 performance

+86%

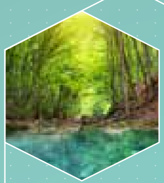
2021	13,749
2020	7,610
2019	2,000
2018	2,179

Why we measure
As a B2B, B2C and B2B2C ingredient brand, HeiQ is building its brand awareness across different target audience groups. Media mentions are "earned" media, which show our ability to gain face time with the audience without having to invest heavily in media-buying.

A purpose beyond profit: people + environment.

Our purpose defines our reason for being, beyond being profitable.

At HeiQ we make a positive contribution to society through authentic leadership and excellence in our core activities. Our purpose is both retrospective – based on our past and the DNA of our Company – and prospective, with ambitions for a better tomorrow. Our business cannot thrive in a society that fails. What is good for business and what is good for society go hand in hand in our sustainable business with a clear purpose and a triple bottom line that connects profit with an aspirational purpose.



HeiQ is dedicated to improving the lives of billions of people by adding functionality (comfort, hygiene, protection, resource efficiency) to the materials of their products.

We do this by developing, manufacturing and marketing novel eco-friendly and bio-based durable technologies.

Our purpose is not words on a wall but a daily mission for all HeiQans.

HeiQ's guiding star

Our ethos is based on the saying that we did not inherit the earth from our ancestors but borrow it from our children.

We acknowledge that the textile industry is one of the most polluting and resource depleting industries in the world, driving raw material depletion, energy and water usage, water pollution, microplastics, mountains of waste. Only with innovation can one drive changes, and that is our key motivation.

The time for changing the game is now; we join hands and collaborate for resource efficiency and scalable circularity in our industry. The launch of climate-positive HeiQ AeonQ fiber to substitute oil-based polyester is testament to our determination to work with partners to achieve resource efficiency and scalable circularity in the textile industry.

Combining our three areas of expertise – scientific research, specialty materials manufacturing and consumer ingredient branding in a holistic approach, it is our ambition to engage all stakeholders in the value chain and together make quantum leap improvements towards a better world.

ESG strategy: Little Big HeiQ

Our ESG strategy is a unifying theme that gives coherence and direction to our decisions and actions to realize our sustainability ambitions. The strategy can best be summarized as "Little Big HeiQ makes tech innovation around the world".

Everything we do, all our innovation, has sustainability at the core. As a functional ingredient technology provider we not only seek to reduce our own impact but we enable other members of the value chain to do so: textile mills, retailers, consumer brands and consumers.

We see industrial challenges as opportunities and strive for our internal and external sustainability communities to be diverse and inclusive. Collaboration, co-creation and diversity drive creativity, market intelligence and industry-spanning cross-pollination. Our strategic capability in developing green and clean technology helps us and our partners to initiate disruptive change to bring a sustainable, competitive advantage to our alliance.

Stakeholder identification

The stakeholder power-interest matrix helped us to identify our six most relevant stakeholders. Stakeholders who will in turn help us define our Company's most significant impacts and material topics.

Brand partners, customers, employees, investors, consumers and the HeiQ leadership team were selected from the 40-stakeholder longlist (2021 research).

In 2021 we started the process of stakeholder consultation and engagement via surveys and in-depth interviews.

Materiality matrix

In 2021 we researched HeiQ impacts on the economy, on people and on the environment. A list of 43 impacts (direct and indirect, positive and negative) were submitted to customers and employees. We asked each of them to select their personal top five from the list.

The results of this exercise provide rich input for our materiality matrix. This plots value to stakeholders and value to the business and will enable us to identify the areas of shared value (high business value and high stakeholder value), those that require investment (high business value, low stakeholder value) and risk assessment of the topics that have high stakeholder value and low business value.

Below are HeiQ's top eight impacts by stakeholder group, defined as those ranked in the personal top five by 30+% of members in each group. HeiQ's most relevant perceived impacts are:

Customers

.01
Change agent and innovation powerhouse for eco-friendly technologies and circular economy
80%

.02
Provider of eco-friendly innovation
67%

.03
Provider of quality, compliance, safety and value to customers
47%

.04
Improver of everyday consumer products (hygiene, comfort, performance, protection, safety, durability)
44%

.05
Enabler of innovation and differentiation in the downstream supply chain
39%

.06
Provider of direct economic value to many stakeholders
36%

.07
Provider of employment, income and personal development for 200+ employees
33%

.08
The choice of synthetic, bio-based or natural raw materials for our products
31%

Employees

.01
Provider of eco-friendly innovation
66%

.02
Provider of employment, income and personal development for 200+ employees
57%

.03
Change agent and innovation powerhouse for eco-friendly technologies and circular economy
53%

.04
Leader in business ethics and integrity
49%

.05
Provider of quality, compliance, safety and value to customers
44%

.06
Improver of everyday consumer products (hygiene, comfort, performance, protection, safety, durability)
40%

.07
Provider of direct economic value to many stakeholders
38%

.08
Enabler of innovation and differentiation in the downstream supply chain
30%

The most significant impacts that we take from this survey to define HeiQ's material issues in a broader exercise with all stakeholders are:

- the development, manufacturing and marketing of bio- and eco technology
- our drive and potential to innovate
- our reliability and trust (quality, safety, compliance, ethics, integrity)
- our ability to improve the lives of billions of consumers
- our strong financial performance and employment.

Reporting

We commit to transparent reporting and credible sustainability promises, and see this reporting process as the first steps towards seeking excellence in sustainability.

We subscribe to the principles of the Competition and Markets Authority in the UK and engage to be truthful and accurate, clear and unambiguous, substantiated, not omitting or hiding important information, only making fair and meaningful comparisons and avoiding all inconsistencies between claims and reality, between intentions and practice.

We appreciate that reporting sustainability impacts is a process of continuous improvement and we acknowledge that we may face blind spots, which we invite all stakeholders and readers to point out to us.

GRI Standards

This report is published with reference to GRI Standards (as published in October 2021) in preparation for the transition to reporting in accordance with the GRI Standards.

Refer to the GRI Content Index for a complete overview of the disclosures published in this report.

Greenhouse Gas Protocol

Additional guidance was found in "The Greenhouse Gas Protocol Corporate Reporting" from the World Resources Institute (WRI) https://ghgprotocol.org/

Streamlined Energy and Carbon Reporting (SECR)

1. Methodology

For all companies listed on the London Stock Exchange, it is mandatory to report energy used and carbon emitted according to the UK Streamlined Energy and Carbon Reporting (SECR) guidelines.

Our SECR reporting is based on the requirements stipulated in "HM Government Environmental Reporting Guidelines: including streamlined energy and carbon reporting guidance, March 2019".

https://www.gov.uk/government/publications/environmentalreporting

Additional sources of information (kWh conversion to CO_2-e) are:

- UK Government GreenHouse Gas Conversion Factors for Company Reporting (update June 2021) www.gov.uk
- The International Energy Agency www.iea.org for the global average CO_2 per kWh conversion rate
- The Environmental Protection Agency www.epa.gov for the USA average CO_2 per kWh conversion rate

We gathered the Scope 1 and Scope 2 data for the first time in 2021. We will work systematically on the quality of our data to gather more specific information on our sources of energy and sustainability performance.

We will also smooth and optimize the reporting process by entering reported data in our new ERP system to prevent gaps in the data and facilitate archiving. In the conversion calculations from kWh to CO_2-e we will in future use the more accurate conversion factor for each element in the energy mix and not the average figure for each country. We will provide more detail on the type of natural gas used. Our upcoming AeoniQ pilot commercialization plant in Austria will be integrated in the reporting.

As soon as we have more information on the energy sources and the local availability of alternative sources, we will strive for action towards energy usage reduction and more sustainable solutions.

The data was collected from invoices for electricity, gas and diesel, which are the energy sources used in our HeiQ entities. Most numbers are now reported on a monthly basis. In some units data is provided by the energy supplier on an annual basis.

Gaps in the data were filled by extrapolation or assumptions based on usage in other months.

Our contact for questions and remarks with regard to the SECR reporting is HeiQ sustainability expert Mrs. Sinja Witte sinja.kramer-witte@ext.heiq.com

2. Scope
The physical entities that contribute to this disclosure are: HeiQ Headquarters and lab in Schlieren (Switzerland), production site in Bad Zurzach (Switzerland), HeiQ Chrisal (Belgium), HeiQ Chemtex in Concord, NC and Calhoun, GA (USA), HeiQ Australia, HeiQ Taiwan, HeiQ Iberia (Portugal), HeiQ Medica (Spain), HeiQ RAS in Regensburg (Germany), HeiQ China and HeiQ Life in Bangkok (Thailand).

3. Data
Scope 1
Direct emissions from burning fuel in fixed and mobile owned installations:
31,735 liters of diesel
+ 604,609 kWh natural gas

Total kWh	**952,424.6**
Total t CO_2-e	**1,139.12**

Scope 2
All controlled indirect emissions such as electricity used from vendors for own use
Total kWh **769,245 kWh** purchased electricity

Total t CO_2-e	**284.29**

Scope 1 + Scope 2 total energy usage and carbon-equivalent emissions
1,423.41 t CO_2-e
1,721,669.6 kWh

4. Intensity ratios
Intensity ratios are calculated to evaluate the effect of our actions to reduce the energy consumption and carbon emissions irrespective of fluctuations in revenue. The aggregated and reported revenue for the 2021 reporting year is US$57.87 million.

Scope 1
direct carbon-e emissions ratio

t CO_2-e/revenue in US$m

= 1,139.12 / 57.87 = 19.68

Scope 2
Indirect carbon-e emissions ratio
t CO_2-e/revenue in US$m

= 284.29 / 57.87 = 4.91

Scope 1 + Scope 2
Total carbon-e emissions ratio
t CO_2-e/revenue in US$m

= 1,423.41 / 57.87 = 24.60

GRI Standards disclosures GRI 302 Energy and GRI 305 Emissions

GRI 302 Energy
Disclosure 302-1 Energy
Consumption: **1,721,669.6 kWh**

GRI 302 Energy
Disclosure 302-3
Energy intensity ratio: 1,721,669.6 / 57.87 = **29,750.642**

GRI 305 Emissions
Disclosure 305-1 Emissions
Scope 1: t CO_2-e **1,139.12**

GRI 305 Emissions
Disclosure 305-2 Emissions
Scope 2: t CO_2-e **284.29**

GRI 305 Emissions
Disclosure 305-4
Emissions intensity ratio:
1,423.41 CO_2-e / 57.87 = **24.60**

HeiQ Human Rights Policy

.01

Respect for human rights

Respect for human rights is a fundamental value at HeiQ.

We strive to respect and promote human rights in accordance with the UN Guiding Principles on Business and Human Rights in our relationships with our employees, suppliers, and business partners. Our aim is to help promote human rights within the communities in which we operate.

This Policy is guided by international human rights principles encompassed by the Universal Declaration of Human Rights, including those contained within the International Bill of Rights and the International Labor Organization's 1998 Declaration on Fundamental Principles and Rights at Work.

This policy applies to HeiQ, the entities that we own, the entities in which we hold a majority interest and the facilities that we manage. The Company also expects business partners and suppliers to uphold these principles and urges them to adopt similar policies within their own businesses.

We use due diligence as a means to identify and prevent human rights risks to people in our business and value chain. Where we have identified adverse human rights impacts resulting from or caused by our business activities, we are committed to providing for or cooperating in their fair and equitable remediation. We seek to promote access to remediation where we are linked to or involved in those adverse impacts through our relationships with third parties.

The Human Rights Policy is overseen by the HeiQ PLC Board of Directors, including the Chief Executive Officer.

.02

Diversity and inclusion

We value and advance the diversity and inclusion of the people with whom we work.

We are committed to equal opportunity and are intolerant of discrimination and harassment. We work to maintain workplaces that are free from discrimination or harassment on the basis of race, sex, color, national or social origin, ethnicity, religion, age, disability, sexual orientation, gender identification or expression, political opinion or any other status protected by applicable law. The basis for recruitment, hiring, placement, development, training, compensation, and advancement at the Company is qualifications, performance, skills, and experience.

.03

Safe and healthy workplace

The safety and health of our employees are of paramount importance. Our policy is to provide a safe and healthy workplace and to comply with applicable safety and health laws and regulations, as well as internal requirements. We work to provide and maintain a safe, healthy, and productive workplace, in consultation with our employees, by addressing and remediating identified risks of accidents, injury and health impacts.

.04

Workplace security

We are committed to maintaining a workplace that is free from violence, harassment, intimidation and other unsafe or disruptive conditions due to internal and external threats. Security safeguards for employees are provided, as needed, and are maintained with respect for employee privacy and dignity.

.05

Forced labor and human trafficking

We prohibit the use of all forms of forced labor, including prison labor, indentured labor, bonded labor, military labor, modern forms of slavery and any form of human trafficking.

.06

Child labor

HeiQ endeavors to positively impact the reduction of unlawful labor and child exploitation through compliance with child labor laws. HeiQ understands that children may legitimately perform tasks which do not interfere with their education, do not negatively affect their health, safety, and development, and are in compliance with applicable local, provincial, state, national, provincial, and international laws and regulations.

We prohibit child labor below the age of 15 or the applicable minimum legal age, whichever is higher. The employment of young workers between the ages of 15 and 18 is permissible only in non-hazardous work and when young workers are above a country's legal age for employment.

We prohibit the hiring of individuals that are under 18 years of age for positions in which hazardous work is required.

.07

Work hours, wages, and benefits

We compensate employees competitively relative to the industry and local labor market. We work to ensure full compliance with applicable wage, work hours, overtime and benefits laws.

.08

Guidance and reporting for employees

We strive to create workplaces in which open and honest communication among all employees is valued and respected. The Company is committed to complying with applicable labor and employment laws wherever we operate. The Company also ensures employees are aware of the Human Rights Policy through training and an annual certification process.

Any employee who believes a conflict arises between the language of the policy and the laws, customs, and practices of the place where he or she works, or who has questions about this policy or would like to confidentially report a potential violation of this policy, should raise those questions and concerns with local management, Human Resources, or the Legal Department.

GRI content index

Statement of use

HeiQ PLC has reported the information cited in this GRI content index for the period 1/1/2021–31/12/2021 with reference to the GRI Standards. The GRI version used is GRI-1 foundation 2021.

These disclosures are not available, they are in preparation for the transition to reporting in accordance with the GRI Standards.

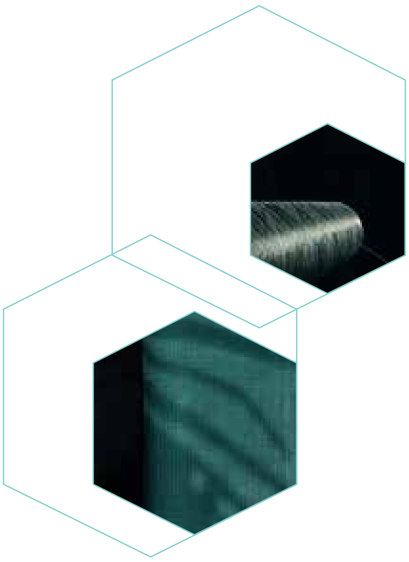
Contact for questions and remarks:
Philip Ghekiere, Sustainability Officer
philip.ghekiere@heiq.com

Sustainability Report continued

On September 21, 2021 HeiQ hosted an online panel discussion on the topic "Sustainability in textiles, Do or Die?".

HeiQ Sustainability Officer Philip Ghekiere was joined by a panel of respected participants in the textile industry with apparel, research, home textiles and raw material innovation represented.

The panel discussion recording is available here: https://heiq.com/heiq-webinars-2021/



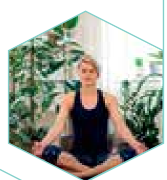
Rob Naughter
Head of Material Innovation and Impact at Patagonia
With the desire to work on material development with finished goods brands, Rob Naughter was keen to work at Patagonia after spending six years as a development engineer with PrimaLoft, a supplier of premium insulation for outdoor and home furnishings. In 2007, Rob joined Patagonia's Ventura headquarters as Materials Developer. In 2013 he became R&D Manager before being appointed Head of Material Innovation and Impact in 2018, to focus on critical performance and sustainable innovation. Rob has pioneered several of the company's most notable sustainable/traceable material developments such as its 100% Traceable Down Standard and the launch of its down-like PlumaFill, which took ten years to come to market.

Julie Lietaer
Founder of Ariadne Innovation and Co-CEO of European Spinning Group
Julie Lietaer is an ambassador for sustainable textiles. She is the founder of Ariadne Innovation and Co-CEO of European Spinning Group. Julie is a Commercial Engineer by education, and holds a master's degree in Financial Management from Vlerick Business School. She has several years of experience as a business consultant at Arthur D Little, and a business analyst at Barco. Julie's expertise lies in the knowledge of fibers and sustainable yarns, as well as in circular product development projects.

Prof. Nico Bruns
Professor of Macromolecular Chemistry at the University of Strathclyde
Nico Bruns is Professor of Macromolecular Chemistry at the Department of Pure and Applied Chemistry of the University of Strathclyde, Glasgow, UK. His research interests are bio-inspired polymer materials, bio-catalysis in polymer chemistry and amphiphilic polymer self-assembly. He studied Chemistry at the Universities of Freiburg (Germany) and Edinburgh (UK) and graduated with a PhD in Macromolecular Chemistry from the University of Freiburg in 2007. After a postdoc at the University of California, Berkeley, he joined the University of Basel in Switzerland where he received the Venia Docendi for Chemistry in 2014. From 2013 to 2018 he was Associate Professor of Macromolecular Chemistry at the Adolphe Merkle Institute of the University of Fribourg, funded by a prestigious Swiss National Science Foundation Professorship.

Sheri McGuire,
Vice President Innovation Concepts at Serta Simmons Bedding
Sheri McGuire is the Vice President Innovation Concepts at Serta Simmons Bedding Company, one of North America's largest bedding manufacturers and the company behind the Serta®, Beautyrest®, Simmons®, and Tuft & Needle® brands. Serta® and Beautyrest® are among America's best-selling mattress brands – iconic names that stand for authentic quality, innovation, and integrity. Sheri leads the "front-end" innovation process for technology development with input from SSB's Marketing and Consumer Insights teams as well as from strategic partners. Sustainability is an SSB strategic innovation pillar and a key focus for Sheri and the Innovation Team as they seek to deliver Sustainable Sleep Solutions. Sheri has a degree in Textile Engineering and has been with Serta Simmons for 14 years.

Harald Cavalli-Björkman
Chief Marketing Officer at Renewcell
Harald joined Renewcell in 2017 as the company made the transition from research to commercialization. He leads marketing and brand development for Circulose®, Renewcell's 100% textile-to-textile recycled material. He also manages business development strategy for the company and played a key role in Renewcell's IPO on Nasdaq First North Premier GM in Stockholm in 2020. Harald holds a B.Sc. in Economics from Uppsala University in Sweden.



Stakeholder engagement.

Section 172 Statement

The Directors of the Company, as those of all UK companies, must act in accordance with a set of general duties. These duties are detailed in section 172 of the UK Companies Act 2006, which is summarized as follows:

"A director of a company must act in the way they consider, in good faith, would be most likely to promote the success of the company for the benefit of the shareholders as a whole and, in doing so have regard (amongst other matters) to:

- the likely consequences of any decisions in the long term;
- the interests of the company's employees;
- the need to foster the company's business relationships with suppliers, customers and others;
- the impact of the company's operations on the community and environment;
- the desirability of the company maintaining a reputation for high standards of business conduct; and
- the need to act fairly as between members of the company."

The following paragraphs summarize how the Directors fulfill their duties:

Shareholders

HeiQ seeks to develop a broad investor base with those who share our values and are supportive of our strategy and mission. Engagement with shareholders is a key element to fulfilling this objective. Besides engaging through the Company's AGM and through publication of full and half-year financial results, members of the executive team, supported by the Company's broker and Investor Relations advisors, engage with investors directly through regulatory news, press releases and other publications, as well as presentations and investor talks.

Employees

The Group maintains a decentralized leadership structure so that all staff are guided and supported in a way that allows them to grow and achieve their potential. The Group has a meritocratic culture, employs staff of different ethnicities and 35% of management is female. A global monthly newsletter ensures that all employees are aware of the important recent developments of the Group, including those of the headquarters as well as each local office. The Group has an informal culture exemplified in social activities organized by the headquarters or local offices, including team sports, group outings, yearly meetings and team-building activities, after-work drinks, an annual dinner and, during the COVID-19 pandemic, virtual social events. As an innovation company, the Group encourages creativity and innovation ideas. With a centralized new idea submission portal on the HeiQ service desk (intranet), every employee can submit their product innovation ideas for the R&D team to review for eligibility to be added to the R&D pipeline.

Customers

Understanding our customers and their customers and what matters to them is of paramount importance to us. We listen and talk to them using all of the tools at our disposal. We collect product innovation ideas and learn about our customers' innovation needs through innovation seminars. We serve our customers directly or, in certain regions, via our qualified agents and distributors. We run consumer polling to identify trends and evaluate product or marketing ideas. Our customers generally appreciate that we share our learning and consumer insights with them, as these help them make better informed business decisions.

Suppliers

Fostering good business relationships with suppliers is important to the Company's success. We are committed to acting ethically and with integrity in all business dealings and relationships. We have long-standing, close relationships with our suppliers and are in regular contact with them.

Community and environment

We are proud to employ people in the communities in which we operate. We have product standards, policies and guidance covering the products we make to help ensure that they are manufactured safely, legally and to the required quality standards. Besides legally required standards, most HeiQ products are also certified for voluntary quality standards such as ZDHC (Zero Discharge for Hazardous Chemicals), bluesign® and OEKO-TEX®.

Business conduct

As explained in more detail in Corporate Governance on page 55, values and culture are an integral part of our strategy and the Board strives to promote a culture based on high business conduct standards.

Acting fairly between members of the Company

Having assessed all necessary factors, and as supported by the processes described above, the Directors consider the best approach to delivering on the Company's strategy. This is done after assessing the impact on all stakeholders and is performed in such a manner so as to act fairly between the Company's members.

Strengthening of foundation while driving growth in times of uncertainty.

Xaver Hangartner
CFO

2021 was a transitional, yet successful year for HeiQ where we were able to grow revenues by 15% from US$50 million in 2020 to US$58 million in 2021 (including acquisitions). HeiQ achieved various milestones on its growth path despite being challenged by the different waves of the COVID-19 pandemic and its impact on global economies throughout the year. By acquiring three companies in adjacent fields, we were not only able to strengthen our range of solutions for hygiene, but also enter new markets like coatings, plastics and synbiotic cleaners.

However our investments were not limited to acquisitions. We also continued to invest significantly in our organization with over 60 more employees in 2021. Our innovation pipeline progressed significantly – spearheaded by HeiQ AeoniQ which was announced to market in Q4 2021. As we developed our innovation pipeline, we continue to evolve from a "specialty chemicals" business with strong IP into an innovator that monetises its IP through licensing, in addition to our own commercialization. In the 2021 Statement of Comprehensive Income however, our own commercialization of IP dominates the picture. We expect to see an increasing portion of revenues derived from monetization of IP in 2022.

In order to have the required scalability of our organization in place on our journey towards the US$300 million revenue target, we kicked-off a Group-wide digitalization program to give the entire Group unified, state-of-the art tools that are scalable as we grow.

HeiQ experienced strong topline growth (+15%) in FY21, whilst pressure on gross margins caused by headwinds from higher raw materials and logistics costs previously flagged in the interim results have continued into the second half of the year (Gross Margin 2021: 46.6% vs. 55.8% in 2020). The investments in people, innovation pipeline and organization have been driving the increase (+52%) in selling and general administrative expenses (SG&A).

Contribution from entities acquired in 2021

In 2021, HeiQ acquired controlling stakes in three companies: Chrisal NV (Belgium – 51% acquired), RAS AG (Germany – 100% acquired) as well as Life Material Technologies Limited (Hong Kong – 100% acquired). Revenue contribution in 2021 of the acquired entities amounts to US$10.0 million and the contribution to profit before tax amounts to US$1.3 million after deduction of transaction costs totalling US$0.2 million.

The total consideration including contingent payments for all three companies is expected to amount to US$27.5 million in total, with US$11.5 million settled in cash and US$16.0 million in HeiQ PLC shares. As of December 31, 2021 US$21.6 million had been settled (US$10.1 million in cash, US$11.5 million in shares), US$0.6 million was settled in shares on February 25, 2022 and US$5.3 million are still contingent and are to be settled in Q2 2022 (US$1.4 million in cash and US$3.9 million in shares). Total net assets of US$10.2 million and goodwill of US$18.6 million have been recorded, while non-controlling interests amount to US$1.3 million.

	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 (restated) US$'000	Growth
Revenue	**57,874**	50,401	15%
Cost of sales	**(30,898)**	(22,268)	
Gross profit	**26,976**	28,133	-4%
Gross profit margin	**46.6%**	55.8%	
Other operating income	**6,426**	4,744	
Selling and general administrative expenses	**(24,465)**	(16,117)	
Other operating expenses	**(5,820)**	(5,127)	
Operating profit	**3,117**	11,633	-73%
Operating profit margin	**5.4%**	23.1%	
Deemed cost of listing	**–**	(1,402)	
Transaction costs	**(206)**	(1,871)	
Other income	**199**	–	
Other costs	**(361)**	(69)	
Finance income	**534**	68	
Finance costs	**(597)**	(1,184)	
Share of (losses)/profits of associates	**–**	(15)	
Income before taxation	**2,686**	7,160	
Taxation	**(212)**	(2,112)	
Income after taxation	**2,474**	5,048	-51%
Adjusted EBITDA	**6,483**	14,104	-54%
EBITDA margin (adjusted)	**11.2%**	28.0%	

Revenues

Revenues increased in 2021 by 15% and amounted to US$57.9 million for the year (2020: US$50.4 million), despite the challenges experienced through unstable markets, local lock-downs and supply chain issues.

Backed by the acquisitions of HeiQ Chrisal and HeiQ RAS, revenues in Europe have been growing significantly from US$10.4 million in 2020 to US$16.2 million in 2021 (+56%). Revenues in the Americas have also seen a strong growth by 9% and amounted to US$21.7 million in 2021 (2020: US$19.8 million). Asia, our third key region, saw slightly lower revenues of US$19.6 million in 2021 (2020: US$19.9 million). This was mainly driven by high, non-recurring revenues in 2020 which could not be compensated for entirely as well as lockdowns in Southeast Asia.

In 2021 we saw a healthy allocation of revenues between our three key regions with the Americas accounting for 37% of revenues (2020: 39%), Asia 34% (2020: 39%) and Europe accounting for 28% (2020: 21%) which makes us less exposed to regional political or economic developments.

Sales by form:
Functional Ingredients remain the key form of how we bring functionality to our customers and with revenues of US$43.7 million accounted for 75% of total sales in 2021 (2020: US$42.0 million or 83% of revenues). 2021 includes acquired revenues of US$4.0 million and thus on a like for like basis shows a decrease of US$-2.3 million which was caused by declining demand of functional ingredients related to face mask applications and other pandemic related items compared to 2020.

Revenues from Functional Materials amount to US$0.9 million in 2021 and achieved a growth of 11% compared to 2020 (US$0.8 million). While in 2020, this category was dominated by filter materials sold for face masks, in 2021 the main materials sold are masterbatches as well as our insulation technology XReflex and show also replacement of non-recurring sales with recurring business.

Revenues from Functional Consumer Goods amount to US$10.1 million in 2021 (2020: US$7.4 million) and thus achieved significant growth (US$+2.6 million or +35%) driven by revenues related to the product range of HeiQ Chrisal (US$3.8 million). Excluding acquired revenues, the category would show a decrease of US$-1.2 million (-16%) which reflects non-recurring opportunities that we were able materialize back in 2020. Accordingly, the composition of this category changed significantly as the Synbio products of HeiQ Chrisal (like household cleaners) have been added.

Consistent with our strategy to grow monetization of IP and knowledge through services and licencing, revenues grew by US$3.1 million to reach US$3.3 million in 2021 (2020: US$0.2 million). While US$1.7 million of service revenues have been onboarded through the acquisition of HeiQ RAS, significant contributions also relate to royalty related exclusivity fees recognized in 2021 (US$0.6 million).

Sales by function:
Hygiene accounted for revenues of US$29.3 million in 2021 (2020: US$29.2 million) – an increase of 1%. This is equivalent to 51% of total revenues in 2021 and includes acquired sales of in total US$8.3 million. The organic growth of US$-8.2 million reflects the non-recurring opportunities that we were able to materialize in 2020 and that we were not fully able to compensate with the growth of the recurring business.

Resource Efficiency, with a share of 23% of total revenues, was our second largest functionality for which revenues amounted to US$13.5 million in 2021 (2020: US$10.0 million) representing a growth of 35%. Acquired revenues for resource efficiency amount to US$1.7 million in 2021 whereas the organic growth amounts to US$1.8 million and reflects that post-pandemic economic recovery we have seen in 2021 in the industries relevant to this category.

Comfort – with 22% share of total revenues, achieved significant growth of 76% in 2021 and respective revenues amount to US$13.0 million in 2021 (2020: US$7.4 million). This growth of US$5.6 million was achieved organically and reflects the strong demand for our comfort technologies.

Revenues for protection of US$2.1 million in 2021 (2020: US$3.9 million) accounted for 4% of total revenues in 2021 and does not include any acquired revenues. Also this category was supported in 2020 by non-recurring opportunities.

Gross profit

Gross profit for the year 2021 amounted to US$27.0 million (2020: US$28.1 million), representing a gross profit margin of 46.6% (2020: 55.8%). The decrease in margin was mainly caused by increased material costs. While material costs accounted for 35% of sales in 2020, this ratio increased to 42% in 2021 (45% excluding acquisitions). This higher portion of material costs was driven by two factors: 1) inflation of raw material prices across the board and on a global scale throughout the year and 2) change in the product mix sold as non-recurring sales in 2020 were replaced with recurring business at lower marginality. Besides material costs, also freight costs increased substantially in 2021 compared to 2020 in general.

Selling and general administration expenses (SG&A)

SG&A costs amounted to US$24.5 million in 2021 – an increase of US$8.4 million or 52% compared to 2020 (US$16.1 million). The main portion of the increase in SG&A costs relates to the acquisitions made in 2021 – with the acquisitions we have onboarded SG&A costs totalling US$5.3 million for the year 2021. The remaining organic increase of US$3 million (+19%) is driven by the growth of the organization with personnel expenses increasing by US$1.2 million (FTE: + 33). Marketing expenses increased significantly as well (US$0.8 million+) like other, general SG&A expense (US$1 million+) as organization has been strengthened across the board.

As a percentage of sales, overall SG&A costs increased from 32% in 2020 to 42% in 2021 (40% excluding the effect of acquisitions). The increase aligns with our strategic investments as it represents mainly investments in human capital required for future growth.

Other operating income and expenses

Other operating income and expenses consist mainly of foreign exchange impacts on operating assets. In 2021, foreign exchange gains of US$5.0 million offset foreign exchange losses of US$4.7 million. Other operating income and expenses not related to foreign exchange gains and losses amounted to US$0.2 million (net income).

Operating profit/adjusted EBITDA

As a result of a lower average gross margin and higher SG&A costs in 2021 relative to 2020, operating profit decreased by US$8.5 million from US$11.6 million in 2020 to US$3.1 million in 2021. Adjusted EBITDA amounted to US$6.5 million in 2021 – a decrease of US$7.6 million compared to the previous year (2020: US$14.1 million).

HeiQ measures EBITDA because it is a good measure of core profit trends as it eliminates some extraneous factors and allows a more accurate comparison between companies. It is also a way of measuring cash generation. HeiQ adjusts EBITDA for share options and rights granted to Directors and employees.

Adjusted EBITDA US$'000	2021	2020 (restated)
Operating profit	**3,117**	11,633
Depreciation	**2,110**	1,144
Amortization	**758**	110
Share options and rights granted to Directors and employees	**498**	1,217
Adjusted EBITDA	**6,483**	14,104

Cashflow

Net cash generated from operating activities in the year 2021 amounts to US$3.5 million vs. US$1.1 million in 2020 (+215%). Besides the acquisition of businesses, significant investments have also been made in internally developed intangible assets – our innovation pipeline (US$3.0 million in 2021) while cash payments for financing activities have been reduced significantly and amounted to US$1.3 million for 2021. Overall, cash generated from the operating business has been invested into growth (investments into intangible asset development and equipment) as well as for repayment of leases and borrowings.

Statement of financial position

HeiQ continues to operate with a strong balance sheet. Total assets grew from US$69.6 million to US$101.9 million (+ US$32.3 million resp. 46.3%) while total liabilities amounted to US$37.2 million as of December 31, 2021 – plus US$17.2 million or 86% compared to 2020 (US$20.0 million). The increases in the financial positions were driven mainly by the three acquisitions concluded in 2021 for a total consideration of US$27.5 million.

The equity ratio remained strong at 63% of total assets as of December 31, 2021 (2020: 71%) and with US$14.6 million of cash as of December 31, 2021 (2020: US$25.7 million) HeiQ remains well positioned for further investments in view of its strategic growth targets.

Non-current assets increased significantly from US$14.3 million (December 31, 2020) to US$49.2 million as of December 31, 2021 as a result of the acquisitions and their related intangible assets.

At US$52.7 million as of December 31, 2021, current assets remained stable (2020: US$55.3 million). After high inventory levels at the end of 2020, inventory value at the end of 2021 remained stable despite 15% higher revenues in 2021 compared to 2020. Receivables increased by US$4.6 million or 34% as of December 31, 2021, driven by higher revenues (+15%), with a particular growth in sales towards the end of the year. Cash as at December 31, 2021 was US$14.6 million. This demonstrates a continuing healthy cash position for the business although reflects a higher than expected cash burn because of lower gross margins and increases in SG&A costs previously mentioned, as well as higher overdue accounts receivables.

The increase in total liabilities was mainly driven by the acquisitions, the growth of the business and liabilities related to leased assets. Other current liabilities of US$6.0 million include not yet settled purchase price payments.

Xaver Hangartner
Chief Financial Officer

Integral to our business.

Corporate risk management is an integral part of running a company.

A comprehensive risk management strategy is an essential part of a truly sustainable business. As such, HeiQ has adopted a systematic method of identifying, analyzing, evaluating, treating, monitoring and communicating risks in a way that will enable us to minimize losses and maximize opportunities.

Risk management will not be able to eliminate risks entirely, but it will enable us to identify, prioritize and manage risks and opportunities in a way that a possible impact can be absorbed by the organization.

Risk management does not only focus on preventing erosion of value and addressing and minimizing risk to an acceptable level, but it can be a tool to set strategies and identify business opportunities to create and maintain value. HeiQ has clearly demonstrated this in the past year. With our diverse range of products and specialized knowledge in material science, we were able to quickly identify an innovation that could generate high demand. We were able to validate and launch the innovation quickly, and adjust our operations as the pandemic unfolded. By responding to the new global situation, we were able to build new businesses around it very quickly.

The heat map appears on the leadership team's agenda quarterly, and a risk report is also reviewed and discussed in Board meetings at least twice a year. As risks can arise from many different angles, they need to be identified top down and bottom up. Having said that, while it is necessary to have a formal risk management system in place throughout the organization, managing risk is also the responsibility of each employee.

.01

Identification of risks

We list key risks in five main categories, as follows:

- **Environmental and hazard risks**
  Natural disasters like fires, earthquakes and flooding, as well as accidents and injuries
- **Operational risks**
  Loss of personnel (talent, key people), supply chain interruptions, IT infrastructure or systems breakdown, cyberattacks, management errors
- **Financial risks**
  Economic recession, currency risk, fraud, liquidity, lack of growth in revenue, tax
- **Strategic risks**
  Increased competition, regulatory changes and governmental restrictions regarding products and production. Brand and corporate reputation, theft of intellectual property
- **Legal risks**
  Compliance of our products and claims, compliance with capital market rules

.02

Measure the risk

Risks are identified and assessed individually, and measured against the likelihood of them occurring and the foreseeable impact if they do occur. See our heat map for our analysis of our principal risks.

.03

Examine solutions

Consider the various solutions to manage each risk, and evaluate the optimal balance between cost and effectiveness. Organizations usually have the option to accept, avoid, control or transfer a risk.

.04

Manage the risk

Once solutions are listed and prioritized, we allocate resources and personnel, including senior management, possibly with external expertise as appropriate. A process is established to implement the solution and actively manage the risk.

.05

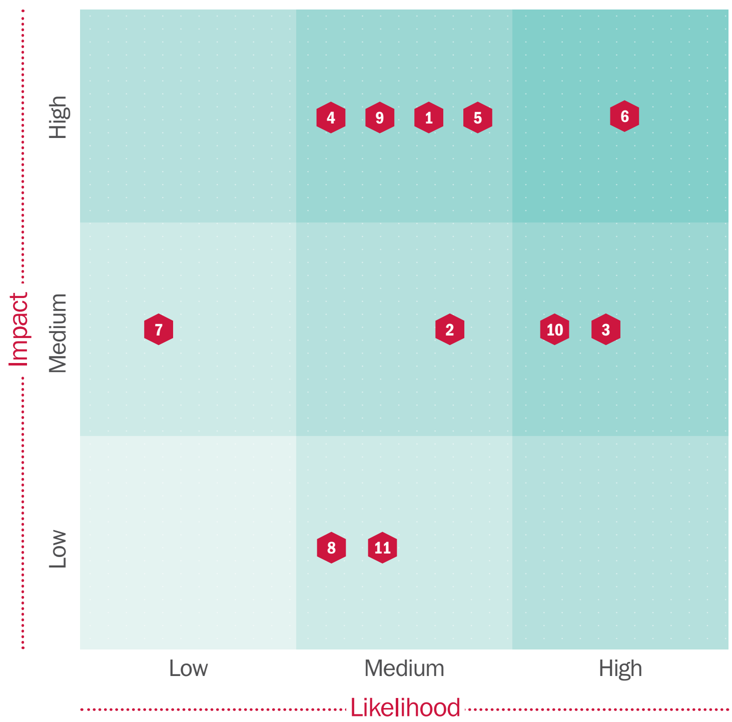
Monitor results

Since the organization, the environment and potential risks are constantly changing, risk management is a continuous process which needs to be monitored regularly. A formalized process ensures a more complete picture of the organization which enables more informed decision-making.

Risk heat map

This risk heat map demonstrates how we consider the likelihood and impact of our principal risks. It provides a reliable basis for comparison and classification of risks and allows management to focus on the potential risks which need the most urgent attention, while not losing sight of all the other types of risk.

1. Delivery of growth strategy/ growth rates not sustainable
2. IP protection and first-mover advantage
3. Increase in competition
4. Innovation pipeline
5. Regulatory risks
6. Supply chain issues
7. Product liability
8. Geographical risks
9. Reputational risk/brand equity
10. Personnel
11. Currency risks



Principal risks and uncertainties

Principal Risk	Description and Impact	Controls/Mitigation	Trend
.01 Delivery of growth strategy/growth rates not sustainable	If the Group does not successfully implement its growth strategy for a high margin business, this could have a material adverse effect on the business, financial condition and operating results.	Clear communication of strategy and alignment throughout the organization with an Executive Board (Lead Circle) sponsoring each of the defined strategic initiatives. Leadership culture based on objectives and key results (OKR) that are aligned with the strategy.	Stable
.02 IP protection and first-mover advantage	Any failure to substantiate or successfully assert HeiQ's intellectual property rights could make us less competitive and may have a material adverse effect on net revenue. HeiQ may face challenges to its intellectual property rights from third parties. If we are unable to successfully defend against allegations of infringement, we may face various sanctions, including injunctions, monetary sanctions, product recalls and alterations to our products and/or packaging, which could result in significant expense and negative publicity.	HeiQ's business relies on protecting our brands and claims through a combination of intellectual property rights, unique market positioning, trade secrets and freedom to operate strategies. It is key to the Group's intellectual property protection strategy to constantly innovate and further develop our existing product portfolio to maintain a first-mover advantage.	Stable
.03 Increase in competition	As competing products come to market in direct competition to HeiQ's products, particularly from large global companies, this may result in a reduction in sales and therefore in revenues and associated profit margins. HeiQ faces substantial competition throughout our business from international and domestic companies.	HeiQ's innovations typically open up new markets and thus the Group enjoys a first-mover advantage. HeiQ, with its three-in-one approach (innovation, production and marketing), positions itself as a partner to brands over the entire lifecycle of a technology, which provides a lock-in effect.	Stable to increase
.04 Innovation pipeline	Bringing innovations to market at high speed and high pace is key to the Group's growth strategy and market positioning. Failure to launch innovations at a high pace might have a material adverse impact on the Group's growth and operating results.	HeiQ has a rich pipeline of innovation ideas and a clear, lean process for assessing and developing these ideas into product offerings. The Innovation Advisory Board prioritizes innovation projects based on technical feasibility and market potential; the Group's network of research partners allows it to access knowledge needed for each individual project.	Stable

Principal Risk	Description and Impact	Controls/Mitigation	Trend
.05 Regulatory risks	The manufacturing and marketing of chemicals and medical devices are subject to medical, biocidal, chemical and environmental regulations and permits. Such regulations change constantly and require HeiQ to invest in our regulatory portfolio in order to maintain access to the markets and licenses to operate. Failure to do so may result in restricted market access or prevent HeiQ from manufacturing our products in the relevant plants. Regulators in different jurisdictions might restrict use of certain ingredients that are included in HeiQ products and disallow marketing of respective products in different markets.	We follow regulatory developments closely and actively manage our product portfolio and innovation pipeline accordingly. It is an integral part of HeiQ's strategy to innovate and replace current solutions with "greener", future-proof technologies. We engage actively in regulatory discussions in industries where we operate and we have recruited additional experts to resource increased market requirements.	Increase
.06 Supply chain issues	We face the risk of supply chain interruptions and disruptions in our production facilities, which could materially and adversely affect the results of operations. Significant disruptions to suppliers' or our own operations, such as those resulting from natural catastrophes, outbreaks of diseases, acts of war or terrorism may affect our ability to source raw materials and negatively impact our costs. The failure of suppliers to fulfill their contractual obligations in a timely manner may result in delays or disruptions to our business. Replacing suppliers may require a new supplier to be qualified under industry, governmental or HeiQ's own internal standards, which may take time. In addition, a number of our facilities are critical to our business. Major or prolonged disruption at those facilities, whether due to accidents, sabotage, strikes, closure by government agencies or otherwise, could materially and adversely affect operations. Moreover, manufacturing sites are subject to supervision by regulatory agencies, on both an ongoing and ad hoc basis. If the Group is unable to obtain or produce sufficient quantities of a particular product at specifically approved facilities, whether due to disruption to, or failure of, manufacturing processes, or otherwise, it may fail to meet customer demand on a timely basis, which could undermine sales and result in customer dissatisfaction and damage to reputation.	We source raw and packaging materials and finished goods from a wide variety of international chemical and packaging companies and co-producers. We source key (raw) materials whenever possible from at least two different suppliers. We periodically assess potential for back integration of materials that allow either a material cost or strategic advantage, including supply security. We have increased our inventory holding of critical raw materials and place larger orders at key suppliers.	Increase

Principal risks and uncertainties continued

Principal Risk	Description and Impact	Controls/Mitigation	Trend
.07 Product Liability	As a product manufacturer, HeiQ is subject, from time to time, to certain legal proceedings and claims arising out of our products, including as a result of unanticipated side effects or issues that become evident only after products are widely introduced into the marketplace. HeiQ may be required in the future to pay compensation for losses or injuries that are allegedly caused by our products. Product liability claims may arise, among other things, from claims that products are defective, contain contaminants, provide inadequate warnings or instructions, or cause personal injury to persons or damage to property. Product liability claims, if resolved unfavorably, or if settled, could result in injunctions and/or may require HeiQ to pay substantial damages and related costs, including punitive damages, as well as result in the imposition of civil and criminal sanctions. If one of HeiQ's products is found to be generally defective, HeiQ could be required to recall the product, and/or may be required to alter trademarks, labels or packaging, which could result in adverse publicity, significant expenses, potential disruptions in the supply chain and loss of revenue.	HeiQ operates with defined quality control procedures integrated in production to ensure that products sold are within specifications defined and agreed with customers. Having onboarded multiple suppliers for each raw material reduces the risk of supply chain issues but increases the risk of variation in ingredients, which may impact quality control.	Stable to increased

Principal Risk	Description and Impact	Controls/Mitigation	Trend
.08 Geographical risks	HeiQ operates in a variety of countries which have different laws, taxes and different levels of maturity, together with a range of competitors and customer expectations. HeiQ's business and results of operations are affected by changes in both global economic conditions and the individual markets in which we operate. Terrorist acts, civil unrest and other similar disturbances, as well as natural catastrophes, can impact economic conditions and consumer confidence, degrade infrastructure, disrupt supply chains and otherwise result in business interruption. A variety of factors may adversely affect results of operations and financial conditions during periods of economic uncertainty or instability, social or labor unrest or political upheaval in the markets in which we operate. HeiQ has no business in Ukraine and Russia and thus no direct exposure to the conflict that started in February 2022.	HeiQ's strategy includes developing a global footprint for innovation and manufacturing, as well as sales and distribution channels. This includes our own presence, as well as cooperation with third parties, such as distributors. This ensures that the Group is able to serve one market through different channels, both from within and outside of the respective geographical area. We are developing a local presence in key markets to ensure local markets and regulatory frameworks (including laws, taxes, etc.) are well understood and addressed appropriately.	Stable
.09 Reputational risk / Brand equity	Substantial harm to HeiQ's reputation may materially adversely affect our business. Various factors may adversely impact HeiQ's reputation, including product quality inconsistencies. Product defects may occur due to human error or equipment failure, among other things, which may be outside of our direct control. Reputational risks may also arise with respect to the methods and practices of third parties that are part of HeiQ's supply chain, including labor standards, health, safety and environmental standards, and raw material sourcing. HeiQ may also be the victim of product tampering. Moreover, third parties have sold or may sell products that are counterfeit or unauthorized versions of HeiQ's products or inferior "lookalike" products that resemble HeiQ's. Consumers may confuse our genuine products with such unauthorized products, which may adversely affect HeiQ's reputation.	We have a clear strategy and policy in regards to communication, both in terms of product marketing as well as on a corporate level. We actively manage claims that are allowed in different jurisdictions for different products, and these are also reflected in trade mark license agreements with our customers. HeiQ actively follows and manages communication both off- and online to ensure potential issues can be addressed in a timely and appropriate way.	Increase

Principal risks and uncertainties continued

Principal Risk	Description and Impact	Controls/Mitigation	Trend
.10 Personnel	HeiQ's business depends, in part, on the ability of executive officers and senior management to provide uninterrupted leadership and direction for the business, and, in particular, on the ability to recruit, train and maintain qualified personnel for product research and development. This need is all the more acute in the context of a growing business and in the strategic internal reorganizations and resource planning programs to promote and manage such growth. HeiQ's ability to attract and retain key management and other personnel is dependent on a number of factors, including prevailing market conditions, attractiveness of competitors as potential employers, working conditions and culture, and the ability to offer attractive compensation packages.	We have a structured hiring process to ensure the cultural fit of new hires. HeiQ offers key senior management and talent participation via our share option plan to align incentives of individual employees to that of the Group. HeiQ supports employees' growth based on professional and personal development. HeiQ fosters an inclusive, meritocratic work atmosphere where employees can contribute and participate. We also offer flexible work models allowing alignment of work with private and family life.	Stable
.11 Currency risks	HeiQ Group operates mainly in CHF, EUR, CNY, TWD and US$ and reports in US$. Consequently, changes in the GBP, CHF, EUR, CNY, TWD and US$ exchange rates will impact on the earnings of the Company. The exchange rates are affected by numerous factors beyond the control of the Group, including international markets, interest rates, inflation and the general economic outlook and, as such, the Group may not be able to adequately manage these risks in some circumstances.	The Group as far as possible aligns operational cash in- and outflows in the respective currencies to achieve a natural hedge. Remaining short or long positions are monitored centrally and subject to hedging where appropriate.	Increase

The Strategic Report was approved by the Board of Directors and signed on its behalf by:

Carlo Centonze
Director
April 27, 2022


HEIQ

The Board

Esther Dale-Kolb
Chair
Non-executive Director

Committees

Esther was Chief Executive Officer of Dr. W. Kolb Holding AG (Kolb), a Swiss specialty chemicals company. From 1991 until 2007 Esther was CEO of the Kolb Group, with over 200 employees, producing in Holland and Switzerland as an internationally operating specialty chemicals company. Esther managed the change from a pioneer-driven family company to a process-orientated modern business with a cooperative management style, contributing to substantial growth in production capacity, revenue and EBIT. She then successfully concluded the trade sale of the Kolb Group to Kuala Lumpur Kepong Berhad, KLK Malaysia and remained on the board for a further 18 months. Before leading Kolb, Esther worked as a product manager in paper chemicals and started her career as a laboratory technician at Dow Chemical. She completed her apprenticeship at the Swiss Federal Institute of Technology, ETH Zurich, and received her Bachelor of Science degree at King's College London. Esther was active as a member of the board of the Swisscross Foundation, a Swiss charitable foundation. Esther is the Chair of HeiQ.

Carlo Centonze
Co-founder and CEO
Executive Director

Committees

Carlo studied Environmental Sciences and Forest Engineering (MSc) at the Swiss Federal Institute of Technology, ETH Zurich. He earned his Executive MBA at the University of St. Gallen (HSG). After his service as an army pilot, he started his professional career as co-founder of the ETH spin-off, myclimate, a non-profit organization and prominent provider of carbon offsetting measures. Since 2004, Carlo has served HeiQ as co-founder and CEO, developing the firm from a two-employee company to an over 200-employee company. He also serves as chairman of ECSA Group, a 108-year-old Swiss chemical and energy distributor with an annual consolidated turnover of over US$300 million and is a member of the executive board of Science Industries, the Swiss association of the pharmaceutical, biotech and chemical industries.

Xaver Hangartner
CFO
Executive Director

Committees

Xaver started his career in finance in 2005 after obtaining a bachelor's degree in Business Administration from the University of St. Gallen (HSG). At the beginning of his professional career, he worked with EY Switzerland as an auditor for industrial clients and graduated as a Swiss Certified Public Accountant in 2009. He later worked in various finance positions and led the global finance and accounting team of a listed Korean specialty chemical producer before joining HeiQ in 2018 as Head of Controlling. He was appointed Group Chief Financial Officer in October 2019.

Benjamin Bergo
Non-executive Director

Committees

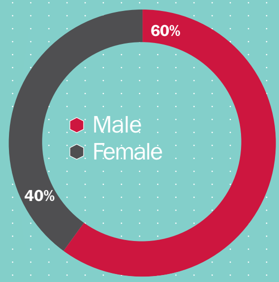
Ben brings a wealth of experience in high growth technology operations and venture capital. He currently serves as President and CEO of Visus Therapeutics, Inc., an ophthalmic drug development company with offices in Seattle, WA, and Irvine, CA. He has previously served on the board of several high growth companies, including as a non-executive director at Lumos Diagnostics Holdings Ltd (ASX:LDX), a leading full-service provider of point-of-care diagnostic solutions; as a non-executive director of Planet Innovation Holdings Limited, a healthtech innovation and commercialization company, and he led investments into life sciences transactions at a seed stage venture fund between 2007 and 2011. Prior to this, Ben held management roles at Vision BioSystems, until the sale of Vision Systems Limited to Danaher Corporation in 2006.

Karen Brade
Non-executive Director

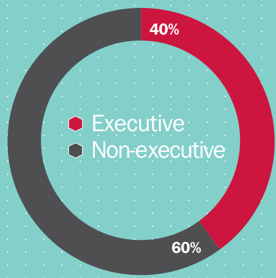
Committees

Karen has extensive experience of project finance, private equity and asset management. She started her career at Citibank working on multinational project finance transactions. Karen worked at CDC (Commonwealth Development Corporation), the UK Government's development finance institution, where she held positions in equity and debt investing, portfolio management, fund raising and investor development. Karen has been an advisor to hedge funds, family offices and private equity houses. She currently serves as chair of Aberdeen Japan Investment Trust plc; chair of Keystone Positive Change Investment Trust plc; non-executive director and chair of audit at Augmentum Fintech plc and is an external panel member of the Albion Capital VCT investment committee.

Overall gender split



Board structure



Key: Committee membership

- Audit Committee
- Nomination Committee
- Remuneration Committee
- Environmental, Occupation, Health and Safety Committee

Corporate Governance Statement

Esther Dale-Kolb
Chair

Chair's Introduction

Dear Shareholder

I have pleasure in introducing HeiQ's Corporate Governance Report, our second one following the Re-admission of the Company's securities on the London Stock Exchange in December 2020. The Board is committed to the principles underpinning good corporate governance. We aim to apply these in a manner which is most suited to the Company, and best addresses the Board's accountability to shareholders and other stakeholders. The Company, therefore, voluntarily observes the requirements of the QCA Corporate Governance Code (the "Code") as the Board feels that this Code is more appropriate for the Company's size and stage of development than the more prescriptive UK Corporate Governance Code.

During the period under review, the Company has complied with the QCA Corporate Governance Code with the exception of, inter alia, the expectation that each member of the Remuneration Committee be independent and each independent non-executive Director be re-elected on an annual basis. The Company will keep these matters and its governance framework under review as it continues to grow and develop.

In this report, we have set out how we have applied the ten principles of the Code in the year ended December 31, 2021.

Esther Dale-Kolb
Chair

Delivering growth

Strategy and business model

Principle one of the Code requires that companies establish a strategy and business model which promotes long-term value for shareholders. Our strategy, and the key challenges we face in executing the strategy, are set out in the Strategic Report on pages 18 to 19. HeiQ's leadership team meets regularly and focuses on the delivery of the Group's strategic plan which is set by the Board. The Chief Executive Officer reports to the Board on progress, and the Board supports and challenges the leadership team. Employees are kept informed of strategy and progress through regular employee briefings and newsletters.

Shareholder relations

Under principle two of the Code, we are required to seek to understand and meet the needs and expectations of our shareholders. In order to achieve this, we plan to make our Executive Directors available to shareholders through regular meetings throughout the year along with investor roadshows around the time of our financial results announcements.

Stakeholder engagement

Principle three of the Code requires us to take into account wider stakeholder and social responsibilities and their implications for long-term success. We consider our key stakeholders, in addition to our shareholders, to be our employees, our partners, our customers, our suppliers, our bankers and our lenders, the local communities in which we operate and the environment. More information on our engagement with our key stakeholders can be found in our s172 Statement on pages 38 to 39 of this report.

Risk management

Principle four of the Code requires the Company to embed effective risk management, considering both opportunities and threats, throughout the organization. The Company's significant risks and uncertainties are set out on pages 46 to 50 of this report together with a summary of how risk management is executed within the Group.

Maintaining a dynamic management framework

The Board

Principle five of the Code calls for the maintenance of the Board as a well-functioning, balanced team led by the Chair.

The Board is led by Esther Dale-Kolb, who is the non-executive Chair. The Board also includes two non-executive Directors who both have extensive experience with international and/or UK listed companies, and two Executive Directors. All Directors, including the Chair, hold shares in the Company. The two Executive Directors and the Chair are not considered independent, while the two non-executive Directors are considered independent.

There are four Board Committees: the Audit Committee, the Remuneration Committee, the Nomination Committee and the Environmental, Occupation, Health and Safety Committee (EOHSC) which the Board established during the course of 2021. More information on the Audit, Environmental, Occupation, Health and Safety Committee, Nomination and Remuneration Committees can be found on pages 52 to 62.

There have been nine Board meetings during the financial year to December 31, 2021 and all Directors attended.

Directors are expected to attend all Board meetings and the meetings of the Committees on which they sit. They are also required to devote sufficient time to the Company to enable them to fulfill their duties as Directors. The time commitment expected of the non-executive Directors is set out in their letters of appointment.

The Board's skills and capabilities

Principle six of the Code requires that the Company ensures that, between them, the Directors have the necessary up-to-date experience, skills and capabilities. The Board comprises five individuals with a mix of skills and experience that is most appropriate for the Company at this stage in its development. More information on the background and skills of the individual Directors can be found on pages 52 to 53. The Board's gender balance is good, being two female and three male Directors.

The Board's training and development needs will be met by implementing appropriate training periodically during the course of 2022. The Company Secretary tables a report at each Board meeting which covers any significant developments in corporate governance.

Board performance and evaluation

The seventh Code principle requires the Board to evaluate its performance based on clear and relevant objectives, seeking continuous improvement. The Nomination Committee conducted an internal evaluation during the second half of 2021.

Succession planning will be addressed by the Nomination Committee which will make recommendations to the Board.

Corporate culture

Principle eight of the Code requires that the Company promotes a corporate culture that is based on ethical values and behaviours. We strive to ensure that our business success is in accordance with the best environmental, ethical and social standards. We aim to provide diligent product stewardship and deliver value to all our stakeholders. We have an entrepreneurial culture where disciplined execution is key. We expect all our employees to work hard and with determination and in return we care for our people who respect each other. We pride ourselves on being customer-focused thinkers who act with integrity, honesty and trust. Sustainability is our guiding star in all our actions, processes and products.

The Board will monitor and promote a healthy corporate culture by conducting an annual employee survey with the aim of capturing strategic alignment, employee satisfaction, as well as suggested improvements.

Governance structure

Principle nine of the Code requires the Company to maintain governance structures and processes that are fit for purpose and support decision-making by the Board. The Board meets at least four times a year. The Audit, Environmental, Occupation, Health and Safety Committee and Remuneration Committees meet at least twice, twice and once a year respectively. The Nomination Committee meets at least once a year and more frequently if circumstances require it.

The Board provides strategic leadership and sets the culture and practices that should be followed throughout the business. The Board maintains a schedule of matters reserved for its decision and these include:

Management structure and appointments:

- senior management responsibilities;
- Board and other senior management appointments or removals;
- Board and senior management succession, training, development and appraisal;
- appointment or removal of the Company Secretary;
- appointment or removal of the internal auditor;
- remuneration, contracts, grants of options and incentive arrangements for senior management;
- delegation of the Board's powers;
- agreeing to membership and terms of reference of Board Committees and task forces;
- establishment of managerial authority limits for smaller transactions; and
- matters referred to the Board by the Board Committees.

Strategic/policy considerations:

- business strategy;
- diversification/retrenchment policy;
- specific risk management policies, including insurance, hedging, borrowing limits and corporate security;
- agreement of codes of ethics and business practices;
- receipt and review of regular reports on internal controls;
- annual assessment of significant risks and effectiveness of internal controls;
- calling of shareholders' meetings; and
- avoidance of wrongful or fraudulent trading.

Corporate Governance Statement continued

Transactions:
- acquisitions and disposals of subsidiaries or other assets over 10% of net assets/profits;
- investment and other capital projects over a similar level;
- substantial commitments including:
  - pension funding;
  - material contracts in excess of one year's duration; and
  - giving securities over significant Group assets (including mortgages and charges over the Group's property);
- contracts not in the ordinary course of business;
- actions or transactions where there may be doubt over property;
- approval of certain announcements, prospectuses, circulars and similar documents;
- disclosure of Directors' interests; and
- transactions with Directors or other related parties.

Finance:
- raising new capital and confirmation of major financing facilities;
- treasury policies, including foreign currency and interest rate exposure;
- discussion of any proposed qualification to the accounts;
- final approval of annual and interim reports and accounts and accounting policies;
- appointment/proposal of auditors;
- material charitable donations;
- approval and recommendation of dividends; and
- approval before each year starts of operating budgets for the year and periodic review during the year.

Liaison with investors:
- liaison with investors regarding the Group's financial commitments; and
- liaison with investors regarding the Group's working and net revenue interests.

General:
- governance of Company pension schemes and appointment of Company nominees as trustee; and
- allotment, calls or forfeiture of shares.

The Board has approved terms of reference for each of the Board Committees to which certain responsibilities are delegated. The chair of each Committee reports to the Board on the activities of that Committee. Further information on the Committees can be found on pages 57 to 62 of this report.

The Chair is responsible for the leadership of the Board, ensuring its effectiveness on all aspects of its role and the setting of its agenda. She ensures the Directors receive accurate, timely and clear information and she is responsible for ensuring the Board's effective communication with shareholders. In leading Board meetings, the Chair facilitates the effective contribution of non-executive Directors and ensures constructive relations between Executive and non-executive Directors.

The Chief Executive Officer is responsible for the leadership and management of the Company, and the implementation of objectives and strategies agreed by the Board.

Build trust

Stakeholder communication

Principle ten of the Code requires the Company to communicate how the Company is governed and is performing by maintaining a dialogue with shareholders and other relevant stakeholders.

During the period under review we have had over 30 interactions with shareholders, have conducted several audits by regulatory counterparts and interacted with our 10,000 consumer strong customer base. Further information on our engagement with shareholders can be found on page 39 of this report.

Esther Dale-Kolb
Chair
April 27, 2022

Audit Committee Report

Karen Brade
Chair

On behalf of the Committee, I am pleased to present the Audit Committee Report for the year ended December 31, 2021.

There are two members of the Audit Committee. I chair the Committee and the other member is Benjamin Bergo. Our biographies setting out our skills and qualifications can be found on page 53 of this report. We are both non-executive Directors. It is intended that the Audit Committee meets at least twice a year and the Committee is responsible for ensuring that the Group's financial performance is properly monitored, controlled and reported. I report to the Board after each Committee and I will attend each Annual General Meeting of the Company.

In the period between January 1, 2021 and December 31, 2021, the Committee has met three times, with both its members in attendance.

Duties of the Audit Committee

Internal control and risk assessment

The Committee assists the Board in discharging its duty to ensure that the financial statements presented by the Company to its shareholders conform with all legal requirements and that the Company and its subsidiaries' financial reporting and internal control policies and procedures for the identification, assessment and reporting of risks are adequate, by keeping such matters under review and making appropriate recommendations to the Board. The Committee also considers the major findings of internal investigations and responses of service providers and reviews its own performance, constitution and terms of reference.

External audit

The Committee considers and makes recommendations to the Board regarding the appointment and reappointment of the Company's external auditor, as well as any questions relating to their resignation or removal. The Committee oversees the relationship with the external auditor, including, but not limited to, the approval of their remuneration and terms of engagement, whether in relation to audit or non-audit services, and annually assesses the auditor's independence, objectivity, qualifications, expertise, resources and effectiveness. The Audit Committee meets the external auditor at least twice a year and reviews the findings of the audit.

Financial statements

The Committee monitors the integrity of the financial statements of the Company, including the annual and interim reports, preliminary results announcements and any other formal announcement relating to its financial performance. It reviews any significant financial reporting issues and judgments, and challenges, where necessary, the Company's financial statements before submission to the Board. The Committee keeps under review the consistency of accounting policies and practices on a year-to-year basis, and across the Company.

The Company has implemented control procedures designed to ensure complete and accurate accounting for financial transactions and to limit the exposure to loss of assets and fraud. Measures taken include segregation of duties and reviews by management.

Reporting responsibilities

The Committee meets formally with the Board at least once a year to discuss matters such as the annual report and the relationship with the external auditor and also makes whatever recommendations to the Board it deems appropriate.

Internal audit and review of third-party service providers

At present, the Company does not have an internal audit function. The decision of whether or not to set up an internal audit function will be made by the Board, on the recommendation of the Audit Committee, based on the growth of the Company, the scale, diversity and complexity of the Company's activities and the number of employees, as well as cost and benefit considerations.

Work of the Audit Committee

For the period since January 1, 2021 to December 31, 2021 the Audit Committee discharged its responsibilities by considering the following matters:

Significant issues in relation to the financial statements

When considering the financial statements, the Committee considered, among others, the issues set out in the table below.

Audit Committee Report continued

Issue	How this was addressed
Annual Report and Accounts	The Committee was required to provide advice to the Board on whether the Annual Report and Accounts, taken as a whole, provide a fair, balanced and understandable assessment of the Company's financial position and future prospects and provide all information necessary to a shareholder to assess the Group's performance, business model and strategy. The assessment was assisted by an internal verification of the factual content by management and a comprehensive review by the senior management team and the external auditors. Following its review, the Committee was of the opinion that the Annual Report and Accounts 2021 were representative of the year and present a fair, balanced and understandable overview, providing the necessary information for shareholders to assess the Group's position and performance, business model and strategy.
Financial Reporting	The Committee reviewed whether suitable accounting policies had been adopted, and whether management had made the appropriate estimates and judgments. In addition, support and assessment were sought from the external auditor. To do so, the Committee received presentations from the CFO and also received reports from the external auditor covering the key risk areas addressed during the year-end audit, and the auditors' view of key judgments made by management. Specific issues addressed by the Committee for the period ended December 31, 2021 included revenue recognition for take or pay and other contracts. Based upon the business assurance process and discussions with management and the external auditor, the Committee was satisfied that the accounting disclosures and assumptions were reasonable and appropriate for a business of the Group's size and complexity, that the external auditor had fulfilled its responsibilities in scrutinising the financial statements for any material misstatements and that the disclosures were satisfactory.

External auditor

The Committee considered the independence and effectiveness of the external auditor. The Annual Report 2021 is the second year Crowe U.K. LLP has been auditing and Ian Weekes has been the audit partner for the same period. The Committee was satisfied with the service provided by Crowe U.K. LLP and recommended that the Board should propose their reappointment at the forthcoming Annual General Meeting. When assessing the independence of the external auditor the Committee took into account the fees paid to Crowe U.K. LLP for non-audit services. The auditor has provided non-audit services to the Company during the period January 1, 2021 to December 31, 2021 for a total amount of US$6,000.

Financial Reporting Counsel (FRC) Audit Quality Review (AQR) team inspection report

On October 28, 2021 the AQR team issued a report on Crowe U.K. LLP's audit of the Company's financial statements for the year ended 31 December 2020. The comprehensive review covered several areas of focus which led to constructive discussions between the Company's Audit Committee and Crowe U.K. LLP. As a result of the review and subsequent conversations Crowe U.K. LLP modified their audit approach which has been considered by the Committee to be an appropriate response to the FRC's findings.

Whistleblowing

The Company has a whistleblowing policy in place which sets out the formal process by which an employee of the Group may, in confidence, raise concerns about possible improprieties in financial reporting or other matters.

Anti-bribery

The Company has an anti-bribery and anti-corruption policy which sets out its zero-tolerance position and provides information and guidance to employees on how to recognize and deal with bribery and corruption issues.

Assessment of the effectiveness of the Committee

The Committee members intend to formalise this process during the course of 2022 having conducted a number of meetings with the Chief Financial Officer and Crowe U.K LLP during 2021.

Karen Brade
Chair
April 27, 2022

Nomination Committee Report

Esther Dale-Kolb
Chair

On behalf of the Committee, I am pleased to present the Nomination Committee Report for the year ended December 31, 2021.

There are three members of the Nomination Committee. I chair the Committee and the other members are Karen Brade and Benjamin Bergo. We are all non-executive Directors. The Committee meets at least annually, close to the end of each financial year, and at such other times as the Nomination Committee requires.

In the period between January 1, 2021 and December 31, 2021, the Committee has met once with all members in attendance.

Duties of the Nomination Committee

Regular reviews

The Committee reviews regularly, and at least annually, the time required from a non-executive Director and whether each non-executive Director is spending enough time to fulfill his or her duties. The Committee reviews the structure, size, composition, skills, knowledge and experience of the Board and the leadership needs of the Group to ensure that the Group continues to compete effectively in its marketplace. The Committee undertakes to consider its own performance, constitution and terms of reference and makes recommendations to the Board about any matters arising.

Board appointments

The Committee is responsible for identifying and nominating, for the approval of the Board, candidates taken from a wide range of backgrounds to fill Board vacancies as and when they arise for any reason, including retirement by rotation. It evaluates, before making an appointment, the balance of skills, knowledge and experience on the Board and, in the light of this evaluation, prepares a description of the role and capabilities required for particular appointments. The Committee is required to give full consideration to succession planning in the course of its work, taking into account the challenges and opportunities facing the Group and the skills and expertise that will be needed on the Board in the future. The Committee ensures that, on appointment to the Board, non-executive Directors receive a contract setting out clearly what is expected of them in terms of time commitments, Committee service and involvement outside of Board meetings.

Recommendations to the Board

The Committee undertakes to make recommendations to the Board about plans for an orderly succession of the Chairman and non-executive Directors and a formal, rigorous and transparent procedure to be used by them. The Committee also considers and recommends, if appropriate, the reappointment of any non-executive Director at the conclusion of their specified term of office or under the retirement by rotation provisions in the Company's Articles of Association. The Committee considers and makes recommendations on the membership of the Audit Committee, the Nomination Committee and the Remuneration Committee in consultation with the Chairmen/Chairwomen of those Committees. The Committee may also, at any time, recommend to the Board the appointment of additional non-executive Directors and any Executive Directors (if such are considered to be appropriate).

Assessment of the effectiveness of the Committee

The Nomination Committee conducted an internal evaluation during the second half of 2021.

Esther M. Dale-Kolb
Chair
April 27, 2022

Remuneration Committee Report

Benjamin Bergo
Chair

Overview

The Remuneration Committee was established upon Re-admission of trading of the enlarged Group as of December 7, 2020. The Committee comprises two non-executive Directors, Benjamin Bergo (Chair) and Esther Dale-Kolb, and one Executive Director, Carlo Centonze.

In the period January 1, 2021 to December 31, 2021, two meetings of the Remuneration Committee were held. The Remuneration Committee will meet at least annually, and the Committee Chair shall attend each Annual General Meeting of the Company. No one shall be present during the discussion of, or vote on, matters regarding her/his own position. The Chair of the Board shall not chair the Committee meeting when it is dealing with the appointment of her successor.

Summary of the Committee's responsibilities

The Committee's responsibilities include the following:

- Regular reviews – to regularly review: the time required from a non-executive Director and whether each non-executive Director is spending enough time fulfilling his or her duties; comparable Company data to ensure that the Board is being adequately remunerated and to a level which will allow the Company to attract new Directors, the Remuneration Committee's own performance, constitution and terms of reference and remuneration to ensure it is aligned to the implementation of the Company strategy and effective risk management, taking into account the views of shareholders and consultants as required.
- Recommendations to the Board – to make recommendations about matters arising from the Remuneration Committee's regular reviews and the annual review of fees paid to the Board and any changes to the current levels of remuneration.
- Option Scheme awards – to make all decisions relating to awards to be made to Executive Directors under the Option Scheme.
- Other matters – to make a statement in the Annual Report, to keep up to date and fully informed about strategic issues and commercial changes affecting the Company and the market in which it operates and to ensure an annual review of the Board and its operations is undertaken.

Chair's statement

The Directors are pleased to present their annual report on remuneration for 2021. The aim of the Remuneration Committee is to set clear objectives for each individual Executive Director and executive management team member relating to the Company's KPIs plus individual and strategic targets taking into account where an individual has particular influence and responsibility. All five Directors of the Company, both Executive and non-executive, are shareholders of the Group. During the year, none of the Directors were granted any share options.

Directors' remuneration policy

The Company's policy is to maintain levels of remuneration sufficient to attract, motivate and retain senior executives of the highest caliber who can deliver growth in shareholder value. Executive Directors' remuneration currently consists of basic salary, benefits (including pensions allowance), performance-related bonus and participation in a share option plan.

The Company continues to seek to strike an appropriate balance between fixed and performance-related rewards, reinforcing a clear link between pay and performance. The performance targets for staff, senior executives and the Executive Directors continue to be aligned to the key drivers of the business strategy, thereby creating a strong alignment of interest between staff, Executive Directors and shareholders. The Remuneration Committee will continue to review the Company's remuneration policy and make amendments, as and when necessary, to ensure it remains fit for purpose and continues to drive high levels of executive performance and remains both affordable and competitive in the market.

The policy is subject to shareholder approval through the votes cast at the upcoming AGM to be held on June 29, 2022.

Benjamin Bergo
Chair
April 27, 2022

Policy table

Base salary		
Purpose and link to strategy	To provide fixed remuneration to: • help recruit and retain key individuals; and • reflect the individual's experience, role, rank and contribution within the Company.	
Operation	The Remuneration Committee takes into account a number of factors when setting salaries, including: • the scope and complexity of the role; • the skills and experience of the individual; • salary levels for similar roles within the industry; • pay elsewhere in the Company.	Salaries are reviewed, but not necessarily increased, annually with any increase usually taking effect in Q1.
Performance conditions	None	
Maximum opportunity	The current base salaries of the Directors can be found in the Directors' Remuneration section.	The Board retains discretion to make higher increases in certain circumstances, for example, following an increase in the scope and/or responsibility of the role or the development of the individual in the role or by benchmarking.

Other benefits	
Purpose and link to strategy	To provide a basic benefits package, in order to help recruit and retain key individuals.
Operation	The Group may provide Directors and management as well as employees with accident insurance, pension insurance and similar benefits in line with legal requirements in the jurisdiction of employment of the respective employee.
Performance conditions	None
Maximum opportunity	Maximum opportunity will be the expense of providing the benefit.

Remuneration Committee Report continued

Annual bonus

Purpose and link to strategy	To incentivize and reward the achievement of annual financial, operational and individual objectives which are key to the delivery of the Company's short-term strategy.	
Operation	Executive Directors and staff are eligible to participate in a discretionary bonus plan. • Maximum bonus levels and the proportion payable for on-target performance are considered in the light of market bonus levels for similar roles among the industry sector. • From 2021 objectives will be set annually to ensure that they remain targeted and focused on the delivery of the Company's short-term goals, which will usually be based on the annual budget. • The Remuneration Committee sets targets which require appropriate levels of performance, taking into account internal and external expectations of performance.	As soon as practicable after the year end, the Remuneration Committee meets to review performance against objectives and determines payout levels.
Performance conditions	At least 60% of the award will be assessed against Company metrics including operational, financial and non-financial performance. The remainder of the award will be based on performance against individual objectives.	A sliding scale of between 0% and 100% of the maximum award is paid dependent on the level of performance.
Maximum opportunity	The maximum potential bonus entitlement for Executive Directors under the plan is up to 100% of base salary.	

Share Option Plan

Purpose and link to strategy	• To incentivize and reward the creation of long-term shareholder value. • To align the interests of the eligible employees with those of shareholders. • To help recruit and retain key individuals.	
Operation	Under the terms of the share option plan (the "Share Option Plan"), the Remuneration Committee may issue options over shares up to 10% of the issued share capital of the Company from time to time. Executive Directors and employees are eligible for awards.	The exercise of options may be subject to the satisfaction of such performance conditions, if any, as may be specified and subsequently varied and/or waived by the Remuneration Committee.
Performance conditions	Vesting of the awards is dependent on financial, operational and/or share price measures, as set by the Remuneration Committee, which are aligned with the long-term strategic objectives of the Company.	The relevant performance conditions will be set by the Remuneration Committee on the award of each grant.

Annual report on Directors' remuneration (audited)

All current Directors took office upon Re-admission of the enlarged Group for trading on December 7, 2020 and have been re-elected at the Company's annual shareholder meeting held on June 25, 2021. The Executive Directors are employed under a service agreement, which is capable of termination by either party giving 12 months' notice in writing. The non-executive Directors are employed under service agreements with notice periods of three months. The non-executive Directors are required to retire and seek re-election by the shareholders as required by the Articles or as the Board resolves. The Articles require all Directors to retire and seek re-election at the second AGM or general meeting (as the case may be) at which he or she was previously appointed.

The Executive Directors have – in addition to the Director's service agreement – entered into employment contracts with HeiQ Materials AG with aligned terms in regard to notification periods. The disclosed emoluments include the total compensation under both agreements.

Directors' emoluments for the year were as follows:

		Salary/Fee		Pension benefits	
	Currency of payment	**2021**	2020	**2021**	2020
Carlo Centonze	CHF	**273,499.00**	208,800.00	**21,177.00**	16,070.00
	GBP	**35,000.00**	2,397.26	**–**	–
Xaver Hangartner	CHF	**183,499.00**	162,400.00	**9,055.00**	7,928.00
	GBP	**35,000.00**	2,397.26	**–**	–
Esther Dale-Kolb	CHF	**–**	–	**–**	–
	GBP	**70,000.00**	4,794.52	**–**	–
Karen Brade	CHF	**–**	–	**–**	–
	GBP	**40,000.00**	12,739.73	**–**	–
Benjamin Bergo	CHF	**–**	–	**–**	–
	GBP	**40,000.00**	2,739.73	**–**	–

		Cash bonus payments		Total	
	Currency of payment	**2021**	2020	**2021**	2020
Carlo Centonze	CHF	**40,600.00**	17,400.00	**335,276.00**	242,270.00
	GBP	**–**	–	**35,000.00**	2,397.26
Xaver Hangartner	CHF	**41,048.00**	27,066.70	**233,602.00**	197,394.70
	GBP	**–**	–	**35,000.00**	2,397.26
Esther Dale-Kolb	CHF	**–**	–	**–**	–
	GBP	**–**	–	**70,000.00**	4,794.52
Karen Brade	CHF	**–**	–	**–**	–
	GBP	**–**	–	**40,000.00**	12,739.73
Benjamin Bergo	CHF	**–**	–	**–**	–
	GBP	**–**	–	**40,000.00**	2,739.73

Annual report on Directors' remuneration (audited) continued

Before the reverse takeover of Auctus Growth Plc and the respective Re-admission in 2020 to trading of the enlarged Group, the HeiQ Materials AG compensation structure for Board of Directors members and key employees included share-based payments with HeiQ Materials AG shares. Since Re-admission in 2020 however, this share-based compensation is no longer in place. The number of shares and the value accounted for in the financial statements of the enlarged Group are as follows:

Share-based payment (HeiQ Materials AG shares)	Year	Number of shares allocated	Value included in the financial statements (CHF)
Carlo Centonze	2021	–	–
	2020	3,600	234,000.00
Xaver Hangartner	2021	–	–
	2020	2,000	130,000.00
Esther Dale-Kolb	2021	–	–
	2020	250	16,250.00
Karen Brade	2021	–	–
	2020	–	–
Benjamin Bergo	2021	–	–
	2020	500	32,500.00

The Directors' interests for disclosure purposes are as follows (not audited):

	Total beneficial interest as of December 31, 2020	Number of options granted in 2021	Shares purchased/sold on market in 2021	Total beneficial interest as of December 31, 2021	% shares and options held of total shares in issue as at December 31, 2021
Carlo Centonze[1]	15,643,362	–	–	15,643,362	11.98%
Xaver Hangartner	1,613,746	–	–	1,613,746	1.24%
Esther Dale-Kolb	902,986	–	–	902,986	0.69%
Karen Brade	7,976	–	–	7,976	0.01%
Benjamin Bergo	284,853	–	–	284,853	0.22%

1. Including shares owned by close relatives and controlled entities.

In 2021 no share options have been issued to any Director.

Share options issued in 2020 are subject to the following conditions:

Exercise price	£1.23 per option share
Employment period	Three years
Performance conditions	• 65% of the options are conditional upon sales growth targets • 35% of the options are conditional upon annual operating margin targets
Changes of conditions compared to prior year/since grant date	None

Share options awarded to Executive Directors in the year are as follows:

	2021	2020
Carlo Centonze	**–**	1,120,000
Xaver Hangartner	**–**	1,120,000

No share options have been awarded to non-executive Directors.

Payments for loss of office

No payments were made to Directors for loss of office in the year.

Directors' Report

The Directors' Report for the year ended December 31, 2021 comprises pages 65 to 67 of this report, together with the sections of the Annual Report incorporated by reference.

Directors

The names and biographical details of the current Directors are shown on pages 52 to 53 of this report.

Name	Date of appointment	Date of resignation
Benjamin Bergo	December 7, 2020	
Karen Brade	December 7, 2020	
Carlo Centonze	December 7, 2020	
Esther Dale-Kolb	December 7, 2020	
Xaver Hangartner	December 7, 2020	

Particulars of the Directors' emoluments and their beneficial and non-beneficial interests in the shares of the Company are shown on page 63.

Powers of the Directors

The Directors manage the business under the powers set out in the Company's Articles of Association. These powers include the ability to issue or buy back shares.

Shareholders' authority to empower the Directors to buy back up to 10% of the Company's issued share capital will be sought at the Annual General Meeting. The Company's Articles of Association can only be amended, or new Articles adopted, by a resolution passed by shareholders in a general meeting by at least three-quarters of the votes cast.

Directors' indemnity provisions

Throughout the year/period under review the Company has maintained directors' and officers' liability insurance cover in respect of the acts or omissions of its Directors and continues to do so. Details of the policy are provided to new Directors on appointment. In common with other companies, the Group has made qualifying third-party indemnity provisions for the benefit of its Directors against liabilities incurred in the execution of their duties.

Political donations

The Company made no political donations and incurred no political expenditure during the year/period under review.

Dividend

The Directors have declared that no dividend would be paid in year 2022.

Substantial interests

Information provided to the Company pursuant to the Financial Conduct Authority's (FCA) Disclosure Guidance and Transparency Rules (DTRs) is published on a Regulatory Information Service and on the Company's website. As at April 27, 2022, the following information has been received, in accordance with DTR 5, from holders of notifiable interests in the Company's issued share capital.

Directors' Report continued

Notifiable interest	Voting rights	% of capital disclosed	Nature of holding
Amati Global Investors Limited	11,607,000	8.89%	Ordinary Shares
Carlo Centonze	8,667,909	6.64%	Ordinary Shares
Dr. Murray Height	8,018,063	6.14%	Ordinary Shares
Premier Miton Group plc	6,827,500	5.23%	Ordinary Shares
Bombyx Growth Fund SC	6,407,120	4.91%	Ordinary Shares
FIL Limited	5,357,000	4.10%	Ordinary Shares
Cortegrande AG[1]	5,186,237	3.97%	Ordinary Shares
Darren Morcombe	5,019,486	3.84%	Ordinary Shares
Mike Smith	4,268,628	3.27%	Ordinary Shares

1. A company wholly owned by Carlo Centonze and of which he is the sole director.

Other information relevant to this Directors' Report can be found on the following pages of this Report:

Topic	Page(s)
Share capital	103 (note 17)
Future developments	22
Research and development	12
Financial instruments	111
Employee share option schemes	103
Restrictions on voting rights	124
Branches outside the UK	126
Environmental matters	30

Annual General Meeting

The Company's Annual General Meeting will be held at the offices of Charles Russell Speechlys LLP, 5 Fleet Place, London EC4M 7RD on Wednesday June 29, 2022 at 10.00 a.m. London time.

Disclosure of information to the auditors

The Directors, who were in office on the date of the approval of this report, confirm that, so far as they are aware, there is no relevant audit information of which the Company's auditor is unaware and that they have taken all reasonable steps to make themselves aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

Statement of Directors' responsibilities in respect of the annual report and financial statements

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

The Directors of the Company are responsible for preparing the financial information in accordance with UK adopted international accounting standards.

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 of the profit or loss of the Group for that period. In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether they have been prepared in accordance with UK adopted international accounting standards; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Company and to prevent and detect fraud and other irregularities.

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.

Directors' responsibilities pursuant to DTR4

The Directors confirm to the best of their knowledge:

- the financial statements have been prepared in accordance with UK adopted international accounting standards and give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group; and
- the management report includes a fair review of the development and performance of the business and the financial position of the Group, together with a description of the principal risks and uncertainties that they face.

Ross Ainger
Company Secretary
April 27, 2022

Independent auditor's report to the members of HeiQ PLC

Opinion

We have audited the financial statements of HeiQ PLC (the "Company") and its subsidiaries (the 'Group') for the year ended 31 December 2021 which comprise the Consolidated statement of comprehensive income, the Consolidated statement of financial position, the Consolidated statement of changes in Shareholders' equity, the Consolidated statement of cash flows, the Group accounting policies, notes to the Consolidated financial statements, the Company statement of financial position, the Company statement of changes in equity, the Company statement of cash flows and notes to the Company financial statements. The financial reporting framework that has been applied in the preparation of the Group and company financial statements is applicable law and UK adopted International Accounting Standards.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2021 and of the Group's profit for the year then ended;
- the Group and Company financial statements have been properly prepared in accordance with UK adopted International Accounting Standards;
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

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

Conclusions relating to going concern

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

- A review of the forecasts including an assessment of how the forecasts are compiled and an assessment of the accuracy of the forecasts;
- Evaluating key assumptions with management's forecasts;
- Considering liquidity and available financial resources;
- A sensitivity analysis of the projections.

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

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

Overview of our audit approach

Materiality

In planning and performing our audit we applied the concept of materiality. An item is considered material if it could reasonably be expected to change the economic decisions of a user of the financial statements. We used the concept of materiality to both focus our testing and to evaluate the impact of misstatements identified.

Based on our professional judgment, we determined overall materiality for the financial statements as a whole to be US$150,000 (2020: US$445.000), based on approximately 5% of profit before tax. Materiality for the Company financial statements as a whole was set at US$14,750 (2020: US$400,000) based on the Company's relative significance to the Group.

For each component in the scope of our Group audit we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between US$5,000 and US$55,000.

We use a different level of materiality ('performance materiality') to determine the extent of our testing for the audit of the financial statements. Performance materiality is set based on the audit materiality as adjusted for the judgements made as to the entity risk and our evaluation of the specific risk of each audit area having regard to the internal control environment. We determined performance materiality to be US$90,000 (2020: US$333,750) for the Group and US$8,850 (2020: US$300,000) for the Company.

Where considered appropriate performance materiality may be reduced to a lower level, such as, for related party transactions and directors' remuneration.

We agreed with the Audit Committee to report to it all identified errors in excess of US$5,000 (2020: US$20,000). Errors below that threshold would also be reported to it if, in our opinion as auditor, disclosure was required on qualitative grounds.

Overview of the scope of our audit

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, considering the structure of the Group and the Company, the accounting processes and controls and the industry in which they operate.

In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed by us, as the Group engagement team, or component auditors within Crowe network firms operating under our instruction. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work in these territories to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the Group financial statements as a whole.

The Group operates in fourteen countries via nineteen separate entities with the size of operation in each territory varying. We identified six reporting components which required a full scope audit of their complete financial information, either due to their size or risk characteristics. These components are the principal operating units in Switzerland, the US, Belgium, Taiwan and Hong Kong as well as the Company.

We also identified a further six components which had one or more individual balances that were considered significant to the Group's financial statements. For these components our work was solely focused on the audit of one or more of the following financial statement line items: revenue, accounts receivable, inventory and research and development.

Audit procedures were performed centrally in relation to various Group functions including the accounting of acquisitions, goodwill, pensions, investments as well as the consolidation and going concern. Our Group engagement team's involvement in the audits of the reporting components was performed primarily by virtual meetings including involvement in the planning with component auditors, regular meetings with component auditors, review of the component auditors planned response to significant risks and the review of auditor working paper reviews for significant components.

Key Audit Matters

Key audit matter	How our scope addressed the key audit matter
Accounting for services, royalty, licenses and other operating income (Group). Note 7. 93.1% of Group revenue is derived from the supply of chemicals which is recognised on despatch from warehouses (2020: 98.2%). In 2021 additional income arose from 'take or pay' exclusivity agreements amounting to US$2.481M (2020: US$ Nil). Additionally, cash was received on entering a new arrangement with Lycra in respect of a technology fee paid on inception of the contract.	We considered cut off as the significant risk area in connection with the supply of chemicals. As a result of our work on cut off, an overstatement of income of US$1.162m was identified and revenue reduced as a result. Of this US$900,000 was in respect of the related party transaction disclosed in note 27. These errors resulted in a reduction in profit of $113,415. We obtained and reviewed the contracts for the 'take or pay' arrangements in place during the year. We considered the terms of these and agreed with management's assessment that those with a shortfall that were coterminous with the Group year-end should be recognised in full. We obtained direct confirmation from the customer with the largest outstanding balance and confirmation of the shortfall for the year ended 31 December 2021. For non-coterminous agreements we reviewed and agreed management's calculation to split the agreement between a product supply and exclusivity element. We considered the basis of income recognition for both elements and agreed that this was in line with the provisions of IFRS15. We obtained and reviewed the details of the arrangement entered into with Lycra just prior to the year end.

Independent auditor's report to the members of HeiQ PLC

continued

Key audit matter	How our scope addressed the key audit matter
Accounting for services, royalty, licenses and other operating income (Group). Note 7 continued.	The arrangement incorporated a US$1m payment on inception of the agreement described as a Technology Fee. We challenged managements identification of a performance obligation associated with that payment. We discussed with the management of Lycra their understanding of the payment, which was to identify this as an advance payment in respect of other performance obligations within the arrangement. Following challenge from us as to whether performance obligations had been met, management agreed that it was not appropriate to include this amount as revenue.
Accounting for acquisition of subsidiaries – valuation of the acquired intangible assets, inventory and consideration. Note 5. As described in note 5 to the consolidated financials the Group made three acquisitions during the year for consideration of US$27.51m. The Group has recorded the assets and liabilities acquired at fair value which included recognition of US$5.727m of intangible assets and inventory of US$2.258m. Attributing fair value to assets acquired and liabilities assumed as part of business combinations is considered a key judgment. The purchase price allocation was performed by management. The Intangible assets were valued using the multi-period excess earnings method, which uses a number of estimates regarding the amount and timing of future cash flows. There is significant estimation required in determining the fair value of intangible assets in relation to the expected future cash flows to be generated, which is highly sensitive to a change in those assumptions. The fair value of inventory also involves estimation and was calculated as the selling price less estimated costs to sell the inventory.	For each acquisition we obtained and reviewed the Sale and Purchase Agreement. We considered management's determination of the date of control and estimate of the fair value of consideration. We agreed with management's determination of the date of control. We reviewed the elements of consideration and considered the basis for estimation of the contingent consideration. Management had identified that rewards related to continued employment were present in the LIFE Material Technologies Ltd acquisition agreement and had excluded this from consideration in the financial statements. For each intangible asset we: • Tested management's process and methodology for determining fair values, • Utilised our in-house valuation experts to evaluate the appropriateness of the valuation methodology and certain assumptions used by management, • Tested the completeness and accuracy of the models as well as the underlying data used in determination of fair value. In order to assess the reasonableness of the fair value of the inventory we reviewed management calculations. We determined that the fair values ascribed to the acquired intangible assets, inventory and consideration were reasonable. We assessed the appropriateness of the disclosures in note 5 of the Group financial statements and considered them reasonable.

Key audit matter	How our scope addressed the key audit matter
Assessment of the recoverability of intangible assets and goodwill. Note 11. The Group has recognised intangible assets following acquisitions and developed its own internally developed intangible assets. Those intangible assets under development and not available for use are tested annually for impairment and other intangible assets are tested when there is an indication of impairment. The determination of the recoverable amounts includes significant estimates, which are highly sensitive and depend upon assumptions including the probability of technical and regulatory success, and the amount and timing of projected future cash flows. Changes in these assumptions could have an impact on the recoverable amount of intangible assets.	We evaluated the design and tested the operating effectiveness of controls over management's assessment of impairment. We determined we could rely on these controls for the purpose of our audit. We reviewed the basis for capitalising development costs and the process for assessing whether to continue with development projects. For assets or cash generating units we: • Tested management's process for assessing whether there is an indication of impairment and the process for determining the recoverable amount, • Evaluated the appropriateness of the methodology used in impairment, • Tested the completeness and accuracy of the models as well as the underlying data used in models, • Evaluated the significant assumptions used by management in determining future cash flows. As a result of our work, we determined that the net impairment charge of US$144K recorded for intangible assets was reasonable. We considered the disclosures in note 11 of the Group financial statements. We are satisfied that these disclosures are appropriate.
Valuation of the Group's net Defined benefit obligations (Group). Note 19. The Group has net defined benefit obligations of US$2.146m at 31 December 2021 (2020: US$3.276m), which is significant in the context of the overall Statement of Financial Position. The Group's most significant scheme is in Switzerland, which comprises 94% (2020: 100%) of the Group's defined benefit obligations. The valuation of pension plan obligations requires estimation in determining appropriate assumptions such as mortality, discount rates and inflation levels. Movement in these assumptions can have a material impact on the determination of defined benefit obligations. Management uses external actuaries to assist in determining these material assumptions.	We confirmed the accuracy of the information provided to the Group's external actuary used to determine the defined benefit obligation. We used our own actuarial experts to assess whether the assumptions used in calculating the defined benefit obligations for Switzerland were reasonable. Our actuarial expert evaluated whether the demographic and financial assumptions incorporated in the valuation were consistent with independently developed rangers, internally coherent and in line with the requirements of IAS19. The company changed its pension scheme provider from SwissCanto to AXA at the year end. We obtained confirmation of the asset value transferred from both parties. In applying the asset uplift for the calculation of assets available to meet pension obligations the company applied the uplift percentage of the new AXA scheme. We discussed this with our actuary who confirmed that this was in line with common practice in Switzerland. Based on our procedures, we noted no exceptions and considered management's key assumptions to be within reasonable ranges. We assessed the appropriateness of the related disclosures in note 19 of the Group Financial Statements and considered them reasonable.

Our audit procedures in relation to these matters were designed in the context of our audit opinion as a whole. They were not designed to enable us to express an opinion on these matters individually and we express no such opinion.

Independent auditor's report to the members of HeiQ PLC

continued

Other information

The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the annual report.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion based on the work undertaken in the course of our audit

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Group and the Company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Company financial statements and the part of the directors' remuneration report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit

Responsibilities of the directors for the financial statements

As explained more fully in the directors' responsibilities statement set out on page 67 the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

Based upon our understanding of the Group and industry, we identified the principal risks of non-compliance with laws and regulations and taxation legislation, and we considered the extent to which non-compliance might have a material effect on the financial statements. We have also considered laws and regulations that have a direct impact on the financial statements such as the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls) and determined that the principal risks related to journal entries to manipulate financial results and potential management bias in accounting estimates. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- Evaluation and testing of the design and operating effectiveness of management's controls to prevent and detect irregularities;
- Challenging assumptions made by management in its significant estimates, in particular in relation to the accounting for acquisitions, the valuation of defined benefit obligations, the impairment of intangibles and the recognition of non-standard income.
- Identifying and testing the validity of journal entries, in particular any journal entries of an unusual nature and consolidation journals.

Owing to the inherent limitations of an audit, there is an unavoidable risk that some material misstatements of the financial statements may not be detected, even though the audit is properly planned and performed in accordance with the ISAs (UK). The potential effects of inherent limitations are particularly significant in the case of misstatement resulting from fraud because fraud may involve sophisticated and carefully organised schemes designed to conceal it, including deliberate failure to record transactions, collusion or intentional misrepresentations being made to us.

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

Other matters which we are required to address

We were appointed by the Audit Committee on 15 December 2020 to audit the financial statements for the period ending 31 December 2020. Our total uninterrupted period of engagement is 2 years, covering the periods ending 31 December 2020 to 31 December 2021.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group's or the Company and we remain independent of the Group's and the Company in conducting our audit.

Our audit opinion is consistent with the additional report to the audit committee.

Use of our report

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Ian Weekes
Senior Statutory Auditor
For and on behalf of
Crowe U.K. LLP
Statutory Auditor
55 Ludgate Hill
London
EC4M 7JW
May 9, 2022

Consolidated Statement of Comprehensive Income

For the year ended December 31, 2021

	Note	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 (Restated*) US$'000
Revenue	7	**57,874**	50,401
Cost of sales	8	**(30,898)**	(22,268)
Gross profit		**26,976**	28,133
Other operating income	7	**6,426**	4,744
Selling and general administrative expenses	8	**(24,465)**	(16,117)
Other operating expenses	8	**(5,820)**	(5,127)
Operating profit		**3,117**	11,633
Deemed cost of listing	5	**–**	(1,402)
Transaction costs	5	**(206)**	(1,871)
Other income	7	**199**	–
Other costs	8	**(361)**	(69)
Finance income	21	**534**	68
Finance costs	21	**(597)**	(1,184)
Share of (losses)/profits of associates		**–**	(15)
Income before taxation		**2,686**	7,160
Taxation	9	**(212)**	(2,112)
Income after taxation		**2,474**	5,048
Earnings per share (cents) – basic	10	**2.07**	4.53
Earnings per share (cents) – diluted	10	**2.01**	4.32
Other comprehensive income:			
Exchange differences on translation of foreign operations		**(1,662)**	2,469
Items that may be reclassified to profit or loss in subsequent periods		**(1,662)**	2,469
Actuarial gains/(losses) from defined benefit pension plans		**899**	(731)
Items that will not be reclassified to profit or loss in subsequent periods		**899**	(731)
Total comprehensive income for the year		**1,711**	6,786
Income attributable to:			
Equity holders of HeiQ		**2,676**	5,125
Non-controlling interests		**(202)**	(77)
		2,474	5,048
Comprehensive income/(loss) attributable to:			
Equity holders of the Company		**1,913**	6,863
Non-controlling interests		**(202)**	(77)
		1,711	6,786

*The financial statements for 2020 have been restated for the correction of an error as described in Note 30.

Consolidated Statements of Financial Position

As at December 31, 2021

	Note	As at December 31, 2021 US$'000	As at December 31, 2020 (Restated) US$'000
ASSETS			
Intangible assets	11	**32,212**	5,264
Property, plant and equipment	12	**6,865**	5,467
Right-of-use assets	13	**9,079**	2,564
Deferred tax assets	9	**701**	826
Other non-current assets	14	**333**	206
Non-current assets		**49,190**	14,327
Inventories	15	**13,770**	13,540
Trade receivables	16	**18,050**	13,437
Other receivables and prepayments	16	**6,275**	2,609
Cash and cash equivalents		**14,560**	25,695
Current assets		**52,655**	55,281
Total assets		**101,845**	69,608
EQUITY AND LIABILITIES			
Share capital	17	**51,523**	49,559
Capital reserve	17	**144,191**	134,537
Other reserve	18	**(1,144)**	(2,043)
Share-based payment reserve	18	**474**	50
Merger reserve	5	**(126,912)**	(126,912)
Currency translation reserve	18	**1,275**	2,937
Retained deficit	18	**(5,823)**	(8,499)
Equity attributable to HeiQ shareholders		**63,584**	49,629
Non-controlling interests		**1,053**	(20)
Total equity		**64,637**	49,609
Lease liabilities	13	**8,176**	2,304
Long-term borrowings	21	**670**	1,400
Deferred tax liability	9	**1,894**	857
Other non-current liabilities	20	**2,619**	3,425
Total non-current liabilities		**13,359**	7,986
Trade and other payables	22	**9,359**	5,815
Accrued liabilities	22	**4,538**	3,214
Income tax liability	9	**51**	1,495
Deferred revenue	22	**1,774**	–
Short-term borrowings	21	**1,004**	173
Lease liabilities	13	**1,054**	349
Other current liabilities	22	**6,069**	967
Total current liabilities		**23,849**	12,013
Total liabilities		**37,208**	19,999
Total liabilities and equity		**101,845**	69,608

The notes on pages 78 to 115 form an integral part of these Consolidated Financial Statements. The Financial Statements on pages 74 to 115 were approved and authorized for issue by the Board of Directors on April 27, 2022 and signed on its behalf by:

Xaver Hangartner
Chief Financial Officer
April 27, 2022

Consolidated statement of changes in shareholders' equity

For the year ended December 31, 2021

	Note	Share capital US$'000	Capital reserve US$'000	Other reserve US$'000	Share-based payment reserve US$'000	Merger reserve US$'000	Currency translation reserve US$'000	Retained deficit US$'000	Non-controlling interests US$'000	Total equity US$'000
Balance at January 1, 2020 (as restated)		**2,696**	**25,168**	**(1,312)**	**–**	**–**	**467**	**(13,624)**	**23**	**13,340**
Income after taxation (restated)		–	–	–	–	–	–	5,125	(77)	5,048
Other comprehensive (loss)/income		–	–	(731)	–	–	2,469	–	–	1,738
Total comprehensive (loss)/income for the year		–	–	(731)	–	–	2,469	5,125	(77)	6,786
Reverse acquisition adjustment		39,587	89,866	–	–	(126,912)	–	–	–	2,542
Issuance of shares	17	7,276	20,763	–	–	–	–	–	–	28,039
Cost of share issues		–	(1,260)	–	–	–	–	–	–	(1,260)
Share-based payment charges	17	–	–	–	50	–	–	–	–	50
Capital contributions from non-controlling interests		–	–	–	–	–	–	–	34	34
Transactions with owners		7,276	19,503	–	50	–	–	–	34	26,863
Balance as at December 31, 2020 (as restated)		**49,559**	**134,537**	**(2,043)**	**50**	**(126,912)**	**2,937**	**(8,499)**	**(20)**	**49,609**
Income after taxation								**2,676**	**(202)**	**2,474**
Other comprehensive (loss)/income				**899**	**–**	**–**	**(1,662)**		**–**	**(763)**
Total comprehensive (loss)/income for the year		**–**	**–**	**899**	**–**	**–**	**(1,662)**	**2,676**	**(202)**	**1,711**
Issuance of shares	17	**1,964**	**9,654**	**–**	**–**	**–**	**–**	**–**	**–**	**11,618**
Share-based payment charges	17	**–**	**–**	**–**	**424**	**–**	**–**	**–**	**–**	**424**
Amounts arising on business combinations	5	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,275**	**1,275**
Transactions with owners		**1,964**	**9,654**	**–**	**424**	**–**	**–**	**–**	**1,275**	**13,317**
Balance as at December 31, 2021		**51,523**	**144,191**	**(1,144)**	**474**	**(126,912)**	**1,275**	**(5,823)**	**1,053**	**64,637**

Consolidated statement of cash flows

For the year ended December 31, 2021

Cash flows from operating activities	**Year ended December 31, 2021 US$'000**	Year ended December 31, 2020 (Restated) US$'000
Income before taxation	**2,686**	7,160
Cash flow from operations reconciliation:		
Depreciation and amortization	**2,868**	1,254
Impairment expense	**144**	–
Gain on disposal of property, plant and equipment	**(54)**	–
Loss on disposal of property, plant and equipment	**20**	46
Loss on disposal of investments	**–**	22
Gain on earnout consideration	**80**	–
Finance costs	**221**	399
Finance income	**(18)**	(68)
Pension expense	**156**	176
Non-cash equity compensation	**498**	1,217
Share of loss/(profit) of associates	**–**	15
Deemed cost of listing	**–**	1,402
Foreign exchange differences	**(877)**	2,195
Working capital adjustments:		
(Increase)/decrease in inventories	**2,028**	(9,186)
(Increase) in trade and other receivables and prepayments	**(4,741)**	(6,141)
Increase in trade and other payables, accrued liabilities and deferred revenue	**2,932**	2,662
Cash generated from operations	**5,943**	1,153
Taxes paid	**(2,462)**	(48)
Net cash generated from operating activities	**3,481**	1,105
Cash flows from investing activities		
Consideration for acquisition of businesses (note 25)	**(10,994)**	(1,424)
Cash assumed on acquisition of businesses (note 25)	**2,137**	27,111
Purchase of property, plant and equipment	**(994)**	(932)
Proceeds from the disposal of property, plant and equipment	**138**	10
Development and acquisition of intangible assets	**(2,969)**	(635)
Proceeds from the disposal of investments	**–**	7
Finance income	**18**	68
Net cash from/(used in) investing activities	**(12,664)**	24,205
Cash flows from financing activities		
Finance costs	**(221)**	(399)
Repayment of leases	**(790)**	(354)
Proceeds from borrowings	**472**	2
Repayment of borrowings	**(803)**	(2,737)
Net cash (used in)/from financing activities	**(1,342)**	(3,488)
Net (decrease)/increase in cash and cash equivalents	**(10,525)**	21,822
Cash and cash equivalents – beginning of the year	**25,695**	3,603
Effects of exchange rate changes on the balance of cash held in foreign currencies	**(610)**	270
Cash and cash equivalents – end of the year	**14,560**	25,695

Note: Non-cash transactions: Certain shares were issued in 2020 for a non-cash consideration as described in note 17.

Notes to the Consolidated Financial Statements

For the year ended December 31, 2021

1. General information

HeiQ PLC (the "Company") and its subsidiaries (together, the "Group") is an IP innovator and established global brand in materials and textile innovation, adding hygiene, comfort, protection and sustainability to the products we use every day. Active in multiple markets: textiles, carpets, antimicrobial plastics, conductive coatings, medical devices, probiotic household cleaners, personal care and hospital hygiene, HeiQ has created some of the most effective, durable and high-performance technologies in these markets today. The principal activity of the Company is that of a holding company for the Group, as well as performing all administrative, corporate finance, strategic and governance functions of the Group.

The Company was incorporated on May 14, 2014 as Auctus Growth Limited, in England and Wales under the Companies Act 2006 with company number 09040064. The Company was re-registered as a public company on July 24, 2014. On December 4, 2020, following a reverse takeover of Swiss-based HeiQ Materials AG, the Company's name was changed to HeiQ PLC. The Company's registered office is 5th Floor, 15 Whitehall, London, SW1A 2DD.

After the reverse takeover, the Company's enlarged share capital was Re-admitted to the standard segment of the Official List and initiation of trading on the London Stock Exchange's Main Market commenced on December 7, 2020 under the ticker "HEIQ". The ISIN of the Ordinary Shares is GB00BN2CJ299 and the SEDOL Code is BN2CJ29.

2. Basis of preparation and measurement

a. Basis of preparation

The Consolidated Financial Statements have been prepared in accordance with UK adopted international accounting standards.

Unless otherwise stated, the Consolidated Financial Statements are presented in United States dollars (US$) which is the presentation currency of the Group, and all values are rounded to the nearest thousand dollars except where otherwise indicated.

The individual entities' functional currencies are listed below:

Subsidiary:	Functional currency
HeiQ PLC, United Kingdom	GBP
HeiQ Materials AG, Switzerland	CHF
HeiQ ChemTex Inc., United States of America	USD
HeiQ Pty Ltd, Australia	AUD
HeiQ GrapheneX AG, Switzerland	CHF
HeiQ Company Limited, Taiwan	TWD
HX Company Limited, Taiwan	TWD
HeiQ Medica S.L., Spain	EUR
HeiQ Iberia Unipessoal Lda, Portugal	EUR
HeiQ Chrisal N.V., Belgium	EUR
HeiQ RAS AG, Germany	EUR
HeiQ Regulatory GmbH, Germany	EUR
HeiQ (China) Material Tech LTD, China	CNY
Life Material Technologies Limited, Hong Kong	USD
Life Natural Limited, Hong Kong	USD
Life-Materials Latam Ltda, Brazil	BRL
LMT Holding Limited, Thailand	THB
Life Material Technologies Limited, Thailand	THB
HeiQ AeoniQ GmbH	EUR

On a single entity level, transactions in foreign currencies are translated into the functional currency at the rate of exchange on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate ruling at the reporting date. The resulting gain or loss is reflected in the "Consolidated Statement of Comprehensive Income" within operating income or operating expense, if the balance sheet account is of operating nature – e.g. trade and other receivables/payables – and within either "Finance income" or "Finance costs", if the balance sheet account is of non-operating nature – e.g. cash and cash equivalents, loans receivable, payable.

Single entities with functional currencies other than US$ are translated into US$ as part of the consolidation where assets and liabilities are translated at closing rate for the year ended, and profit and loss items are translated at an average rate for the year. Equity transactions are translated at a historic rate. The residual value flows into the currency translation reserve.

The Consolidated Financial Statements have been prepared under the historical cost convention except for certain financial and equity instruments that have been measured at fair value.

The Consolidated Financial Statements have been prepared on the going concern basis, which contemplates the continuity of normal business activity and the realization of assets and the settlement of liabilities in the normal course of business. The Directors have reviewed the Group's overall position and outlook and are of the opinion that the Group is sufficiently well funded to be able to operate as a going concern for at least the next 12 months from the date of approval of these financial statements.

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

b. Basis of consolidation

The Consolidated Financial Statements comprise the financial statements of the Company and its subsidiaries listed in note 6 "Subsidiaries" to the Consolidated Financial Statements.

The basis of consolidation of the acquisition of HeiQ Materials AG by the Company in December 2020 is described in the basis of preparation in Note 5(f).

Business combinations other than noted above are accounted for under the acquisition method.

A subsidiary is defined as an entity over which the Company has control. The Company 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. They are deconsolidated from the date that control ceases.

Intra-group transactions, balances and unrealized gains on transactions are eliminated; unrealized losses are also eliminated unless cost cannot be recovered. Where necessary, adjustments are made to the financial statements of subsidiaries to ensure consistency of accounting policies with those of the Group.

The total comprehensive income of non-wholly owned subsidiaries is attributed to owners of the parent and to the non-controlling interests in proportion to their relative ownership interests.

c. Transaction costs

Transaction costs of equity transactions relating to the issue and Re-admission of the Company's shares are accounted for as a deduction from equity where they relate to the issue of new shares and listing costs are charged to the Group Income Statement.

d. New standards, interpretations and amendments effective for the current period

Adopted

One new standard impacting the Group that has been adopted in the annual financial statements for the year ended December 31, 2021:

- COVID-19-Related Rent Concessions beyond June 30, 2021 (Amendments to IFRS 16).

The Group has considered the above new standard and has concluded that it is not relevant to the Group.

2. Basis of preparation and measurement continued

New standards, interpretations and amendments not yet effective for the current period

There are a number of standards, amendments to standards, and interpretations which have been issued by the IASB that are effective in future accounting periods that the Group has decided not to adopt early. The most significant of these are as follows:

Effective for annual periods beginning on or after January 1, 2022:

- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37);
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
- Annual Improvements to IFRS Standards 2018-2020 (Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41); and
- References to Conceptual Framework (Amendments to IFRS 3).

Effective for annual periods beginning on or after January 1, 2023:

- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2);
- Definition of Accounting Estimates (Amendments to IAS 8); and
- Deferred Tax Related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12).

Management anticipates that these new standards, interpretations and amendments will be adopted in the financial statements as and when they are applicable and adoption of these new standards, interpretations and amendments will be reviewed for their impact on the financial statements prior to their initial application.

The Directors do not expect these new accounting standards and amendments will have a material impact on the Group’s financial statements.

3. Significant accounting policies

The preparation of the Consolidated Financial Statements in compliance with IFRS requires the Directors to exercise judgment in applying the Company’s accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the Consolidated Financial Statements are disclosed in note 4 “Significant judgments, estimates and assumptions” to the Consolidated Financial Statements.

a. Foreign currency transactions and translation

The results and financial position of all Group entities that have a functional currency different from the presentation currency are translated into US$ the presentation currency as follows:

- assets and liabilities are translated at the closing rate at the date of the “Statement of Financial Position”;
- income and expenses are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- all resulting exchange differences are recognized in other comprehensive income.

On consolidation, the Group recognizes in “other comprehensive income” the exchange differences arising from the translation of the net investment in foreign entities, and of monetary items receivable from foreign subsidiaries for which settlement is neither planned nor likely to occur in the foreseeable future.

b. Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses, if any. The cost of an item of property, plant and equipment initially recognized includes its purchase price and any cost that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by the Group.

Property, plant and equipment are generally depreciated on a straight-line basis over their estimated useful lives:

Machinery and equipment	5–15 years
Motor vehicles	4–5 years
Computers and software	3–5 years
Furniture and fixtures	5–10 years
Land and buildings	10–20 years

Property, plant and equipment held under leases are depreciated over the shorter of the lease term and estimated useful life.

c. Research and development expenditure

Research expenditure is recognized as an expense when it is incurred.

Development expenditure is recognized as an expense except that costs incurred on development projects are capitalized as long-term assets to the extent that such expenditure is expected to generate future economic benefits. Development expenditure is capitalized if, and only if, an entity can demonstrate all of the following:

- its ability to measure reliably the expenditure attributable to the asset under development;
- the product or process is technically and commercially feasible;
- its future economic benefits are probable;
- its ability to use or sell the developed asset; and
- the availability of adequate technical, financial and other resources to complete the asset under development.

Capitalized development expenditure is measured at cost less accumulated amortization and impairment losses, if any. Certain internal salary costs are included where the above criteria are met. These internal costs are capitalized when they are incurred in respect of products developed for sale. Development expenditure initially recognized as an expense is not recognized as assets in subsequent periods.

Capitalized development expenditure in respect of such products is amortized on a straight-line method over a period of five to ten years when the products or services are ready for sale or use. In the event that it is no longer probable that the expected future economic benefits will be recovered, the development expenditure is written down to its recoverable amount.

d. Intangible assets

All intangible assets, except goodwill, are stated at cost less accumulated amortization and any accumulated impairment losses.

Goodwill

Goodwill represents the amount by which the fair value of the cost of a business combination exceeds the fair value of the net assets acquired. Goodwill is not amortized and is stated at cost less any accumulated impairment losses.

The recoverable amount of goodwill is tested for impairment annually or when events or changes in circumstance indicate that it might be impaired. Impairment charges are deducted from the carrying value and recognized immediately in the income statement. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognized for goodwill is not reversed in a subsequent period.

Acquisition-related intangible assets

Net assets acquired as part of a business combination includes an assessment of the fair value of separately identifiable acquisition-related intangible assets, in addition to other assets, liabilities and contingent liabilities purchased. Acquisition-related intangible assets are amortized on a straight-line basis over their useful lives which are individually assessed.

The estimated useful lives are as follows:

Brand names	10 years
Customer relations	5 years
Technologies	10 years
Other intangible assets	5–10 years

3. Significant accounting policies continued

Other intangible assets

Other intangible assets include those arising from internal development, acquired rights, licenses, patent costs, concessions, website designs and domains and trademarks.

Internally generated intangible assets	5–10 years
Other acquired assets	5–10 years

e. Impairment of financial assets

The expected credit loss model defined in IFRS 9 "Financial Instruments" requires the Group to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition of the financial assets. The credit event does not have to occur before credit losses are recognized. IFRS 9 "Financial Instruments" allows for a simplified approach for measuring the loss allowance at an amount equal to lifetime expected credit losses for trade receivables and contract assets.

The Group has one type of financial asset subject to the expected credit loss model: trade receivables.

The expected loss rates are based on the Group's historical credit losses. The historical loss rates are then adjusted for current and forward-looking information on macroeconomic factors affecting the Group's customers.

f. Impairment of non-financial assets

At each reporting date, the Directors assess whether indications exist that an asset may be impaired. If indications do exist, or when annual impairment testing for an asset is required, the Directors estimate the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs to sell and its value-in-use, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or cash-generating unit exceeds its recoverable amount, the Directors consider the asset impaired and write the subject asset down to its recoverable amount. In assessing value-in-use, the Directors discount the estimated future cash flows to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.
In determining fair value less costs to sell, the Directors consider recent market transactions, if available. If no such transactions can be identified, the Directors utilize an appropriate valuation model.

When applicable, the Group recognizes impairment losses of continuing operations in the "Statement of Comprehensive Income" in those expense categories consistent with the function of the impaired asset.

g. Right-of-use assets

A right-of-use asset is recognized at the commencement date of a lease. The right-of-use asset is measured at cost, which comprises the initial amount of the lease liability, adjusted for, as applicable, any lease payments made at or before the commencement date net of any lease incentives received, any initial direct costs incurred, and an estimate of costs expected to be incurred for dismantling and removing the underlying asset, and restoring the site or asset.

Right-of-use assets are depreciated on a straight-line basis over the unexpired period of the lease or the estimated useful life of the asset, whichever is the shorter. Right-of use assets are subject to impairment or adjusted for any re-measurement of lease liabilities.

The Group has elected not to recognize a right-of-use asset and corresponding lease liability for short-term leases with terms of 12 months or less and leases of low-value assets. Lease payments on these assets are expensed to profit or loss as incurred.

h. Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at inception date: whether fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset.

Identifying leases

The Group accounts for a contract, or a portion of a contract, as a lease when it conveys the right to use an asset for a period of time in exchange for consideration. Leases are those contracts that satisfy the following criteria:

- there is an identified asset;
- the Group obtains substantially all the economic benefits from use of the asset; and
- the Group has the right to direct use of the asset.

The Group considers whether the supplier has substantive substitution rights. If the supplier does have those rights, the contract is not identified as giving rise to a lease.

In determining whether the Group obtains substantially all the economic benefits that arise from use of the asset, the Group considers only the economic benefits that arise from use of the asset, not those incidental to legal ownership or other potential benefits.

In determining whether the Group has the right to direct use of the asset, the Directors consider whether the Group directs how and for what purpose the asset is used throughout the period of use. If there are no significant decisions to be made because they are pre-determined due to the nature of the asset, the Directors consider whether the Group was involved in the design of the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use. If the contract or portion of a contract does not satisfy these criteria, the Group applies other applicable IFRSs rather than IFRS 16 “Leases”.

Lease liabilities are measured at the present value of the contractual payments due to the lessor over the lease term, with the discount rate determined by reference to the rate inherent in the lease unless (as is typically the case) this is not readily determinable, in which case the Group’s incremental borrowing rate on commencement of the lease is used, which the Directors have assessed to be between 1.75% and 5%, depending on the nature of the asset and location.

Variable lease payments are only included in the measurement of the lease liability if they depend on an index or rate. In such cases, the initial measurement of the lease liability assumes the variable element will remain unchanged throughout the lease term. Other variable lease payments are expensed in the period to which they relate.

On initial recognition, the carrying value of the lease liability also includes:

- amounts expected to be payable under any residual value guarantee;
- the exercise price of any purchase option granted in favor of the Group if it is reasonably certain to assess that option; and
- any penalties payable for terminating the lease, if the term of the lease has been estimated on the basis of termination option being exercised.

Right-of-use assets are initially measured at the amount of the lease liability, reduced for any lease incentives received, and increased for:

- lease payments made at or before commencement of the lease;
- initial direct costs incurred; and
- the amount of any provision recognized where the Group is contractually required to dismantle, remove or restore the leased asset.

Subsequent to initial measurement, lease liabilities increase as a result of interest charged at a constant rate on the balance outstanding and are reduced for lease payments made. Right-of-use assets are amortized on a straight-line basis over the remaining term of the lease or over the remaining economic life of the asset if, rarely, this is judged to be shorter than the lease term.

When the Group revises its estimate of the term of any lease (because, for example, it re-assesses the probability of a lessee extension or termination option being exercised), it adjusts the carrying amount of the lease liability to reflect the payments to make over the revised term, which are discounted at the same discount rate that applied on lease commencement. The carrying value of lease liabilities is similarly revised when the variable element of future lease payments dependent on a rate or index is revised. In both cases an equivalent adjustment is made to the carrying value of the right-of-use asset, with the revised carrying amount being amortized over the remaining (revised) lease term.

3. Significant accounting policies continued

i. Taxation

Deferred taxation

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the Consolidated Financial Statements. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the reporting date and expected to apply when the related deferred tax is realized or the deferred liability is settled.

Deferred tax assets are recognized to the extent that it is probable that the future taxable profit will be available against which the temporary differences can be utilized.

Income taxation

Current income tax assets and liabilities are measured at the amount to be recovered from, or paid to, the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the jurisdictions where the Group operates and generates taxable income.

j. Revenue from contracts with customers and other income

Revenue from customer contracts is generally recognized at point in time, once the performance obligation has been fulfilled. This includes the sale of functional ingredients, materials or consumer goods. Services rendered are typically also recognized at point in time.

Revenue from licenses, including those which grant exclusivity rights which are a separable performance obligation from the delivery of goods are typically recognized over time according to the contractual definition of the exclusivity period.

The Group's revenue represents the fair value of the consideration received or receivable for the rendering of services, licenses and similar fees as well as for the sale of functional products in different forms (mainly ingredients, materials and consumer goods), net of value added tax and other similar sales-based taxes, rebates and discounts after eliminating intercompany sales.

For fixed-price contracts, the customer pays the fixed amount based on a payment schedule. If the services rendered by the Group exceed the payment, an amount recoverable on contracts assets is recognized. Conversely, if the payments exceed the services rendered, a liability is recognized. If the contract is time-and-materials based and includes an hourly fee, revenue is recognized over time for the amount to which the Group has the right to invoice.

Take or pay arrangements

Certain customers have agreed, under a "take or pay" contract, to purchase a specified minimum quantity of a range of particular products over a specified period of time, typically in exchange for a specified exclusivity during the same period. However, the customer has to pay for the full quantity stated in the contract, irrespective of whether the customer takes delivery of the minimum quantity to which they are entitled. Upon payment of the full amount, the contract allows customers to defer its unexercised rights and to consume the remaining units to a later date, although there is no compulsion to do so. If the Group expects to benefit from such future exercise by the customer, it recognizes the expected amount as revenue in proportion to the pattern of rights exercised by the customer (by comparing the goods delivered to date with those expected to be delivered overall). In cases where the contract period is not identical with the financial reporting period, revenue and costs are recognized at the end of the respective contractual period. In cases where the obligation to grant exclusivity can be valued separately from the obligation to supply physical products, the exclusivity portion is accounted for as described above over time.

k. Share-based payments

All of the Group's share-based awards are equity settled. Equity-settled share-based payments to employees are measured at the fair value of the equity instruments at the grant date. Equity-settled share-based payments to non-employees are measured at the fair value of services received, or if this cannot be measured, at the fair value of the equity instruments granted at the date that the Group obtains the goods or counterparty renders the service. The fair value of such shares issued has been estimated by reference to the cash consideration received for shares issued or material third party transactions at or close to the dates for such non-cash issues.

The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Directors' estimate of equity instruments that will eventually vest, with a corresponding increase in equity. Where the conditions are non-vesting, the expense and equity reserve arising from share-based payment transactions is recognized in full immediately on grant.

At the end of each reporting period, the Directors revise their estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to other reserves.

l. Employee benefits

Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Long-term benefits

Defined benefit plans

The Group operates a defined benefit pension plan in Switzerland, which requires contributions to be made to a separately administered fund. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognized immediately in the statement of financial position with a corresponding debit or credit to other reserve through “Other Comprehensive Income” in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods.

Past-service costs are recognized in profit or loss on the earlier of:

- the date of the plan amendment or curtailment; and
- the date that the Group recognizes related restructuring costs.

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognizes the following changes in the net defined benefit obligation under “cost of sales”, “administration expenses” and “selling and distribution expenses” in the consolidated statement of profit or loss (by function):

- service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements; and
- net interest expense or income.

Defined contribution plans

The income statement expense for the defined contribution pension plans operated represent the contributions payable for the year.

m. Finance income and expenses

Finance expenses comprise interest payable, lease expenses recognized in profit or loss using the effective interest method, unwinding of the discount on provisions, and net foreign exchange losses that are recognized in the income statement.

Finance income comprise interest receivable on cash deposits and net foreign exchange gains.

Interest income and interest payable is recognized in profit or loss as it accrues, using the effective interest method.

Foreign currency gains and losses are reported on a net basis.

n. Cash and cash equivalents

For the purpose of presentation in the consolidated statement of cash flows, cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, and bank overdrafts.

o. Trade and other receivables

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

p. Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is based on the weighted average principle and includes expenditure incurred in acquiring the inventories and other costs in bringing them to their existing location and condition.

3. Significant accounting policies continued

q. Provisions
A provision is recognized when the Group has a present obligation, legal or constructive, as a result of a past event and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made. Provisions are reviewed at each reporting date and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of economic resources will be required to settle the obligation, the provision is reversed. Where the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, where appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as an interest expense.

Contingent liabilities
Contingent liabilities are possible obligations whose existence depends on the outcome of uncertain future events or present obligations where the outflow of resources is uncertain or cannot be measured reliably. Contingent liabilities are not recognized in the Consolidated Financial Statements but are disclosed unless they are remote.

r. Segmental reporting
The Directors consider that the Group has one reportable segment, that of materials innovation focused on scientific research, specialty materials manufacturing and consumer ingredient branding. Accordingly, all revenues, operating results, assets and liabilities are allocated to this activity.

The Group analyses and measures its sales performance into geographic regions, specifically Europe, North & South America and Asia as well as by form (ingredients, materials, consumer goods or services) and function (Hygiene, Comfort, Protection, Sustainability).

4. Significant accounting judgments, estimates and assumptions

The Directors have made the following judgments which may have a significant effect on the amounts recognized in the Consolidated Financial Statements:

a. Basis of consolidation
The Directors consider that the share-for-share exchange between Auctus Growth Plc and HeiQ Materials AG to be a reverse acquisition as HeiQ Materials AG is considered to be the acquirer. Further details of the basis of consolidation and how the Directors developed the most appropriate accounting policy are outlined in the basis of consolidation within accounting policy note 2(b). The difference between the consideration shares transferred in the combination ("Consideration Shares") and the fair value of the net assets acquired has been charged to the consolidated statement of income as a deemed cost of listing.

b. Defined benefit plans (pension benefits)
The cost of the Group's defined benefit pension plan and other post-employment medical benefits and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

Further details about pension obligations are provided in note 19 "Pensions and other post-employment benefit plans".

c. Impairment of non-financial assets
Management has applied judgment in its testing for impairment of non-financial assets as described in note 11.

5. Business combinations

Business combinations in 2021

a. Acquisition of Chrisal NV
On March 9, 2021, HeiQ Iberia Unipessoal Lda acquired 51% of the share capital and voting rights of Chrisal NV, a company incorporated in Belgium. Chrisal NV is a biotechnology company and a leader in innovative ingredients and consumer products that incorporate the benefits of probiotics and synbiotics. It has technology platforms with the purpose of creating healthy and sustainable microbial ecosystems. The application of its proprietary technology includes cosmetics, personal care, textiles, wound dressings, water purification, air treatment and cleaning products. The company has its office, manufacturing site and bottling facility in Lommel, Belgium.

The purchase consideration was payable partly in cash (€5,000,000, equivalent to approximately US$6,054,000) and partly by the issue of 1,101,928 new Ordinary Shares for €2,500,000 (US$2,982,000), equivalent to a total consideration of US$ 9,036,000.

The acquisition is part of the Group's strategy of becoming a global leader in materials innovation and allows access to the broader market of microbial surface management and a bio-based green complementary technology platform to its successful antimicrobials.

Goodwill of US$6,163,000 was recognized and is attributable to the acquired workforce, anticipated future profit from expansion opportunities and synergies of the business. The goodwill arising from the acquisition has been allocated to the Chrisal CGU. Fair value adjustments have been recognized for property, plant and equipment and acquisition-related intangible assets which are in alignment with accounting policies of the Group.

Transaction costs relating to the acquisition of US$46,000 have been charged to the Statement of Comprehensive Income in the period relating to the acquisition of Chrisal NV.

Chrisal NV contributed US$3,825,000 of revenue for the period between the date of acquisition and the balance sheet date and US$565,000 of income before tax. If the acquisition of Chrisal NV had been completed on the first day of the financial year, Group revenues would have been US$849,000 higher and Group profit attributable to equity holders of the parent would have been US$206,000 lower.

b. Acquisition of RAS AG

On April 29, 2021, the Company completed the acquisition of 100% of the share capital and voting rights of RAS AG, a company based in Regensburg, Germany. The acquisition was for a consideration of €5.1 million (approximately US$6.1 million), with €1.25 million (US$1.48 million) payable in cash and €3.85 million (US$4.66 million) through the issue of 1,701,821 new Ordinary Shares by the Company. It includes an additional earn-out consideration dependent on RAS AG's growth and 2021 calendar year EBIT. The earn-out consideration is capped at an additional €5 million payable in shares for achieving a €2 million EBIT in 2021 and will be satisfied through the issuance of new Ordinary Shares. On the basis of internal forecasts, the Company has estimated the additional earn-out consideration at €2.7 million (US$3.2 million) – a correction of the €2.55 million (US$3.0) disclosed at interim – resulting in an overall consideration of €7.8 million (US$9.37 million).

RAS AG is a materials innovation company that drives the development of resource-efficient and sustainable products. RAS AG develops and manufactures highly functionalized materials for this purpose. This includes the manufacture of antimicrobial, hygiene-enhancing additives and durable antimicrobial coating systems which are sold worldwide under the trademark agpure®, and transparent electrically conductive and infrared reflective coatings sold under the ECOS® trademark. The acquisition is in line with HeiQ's strategic goal to gain market share in hygiene solutions by providing antimicrobial surface hygiene technologies to the healthcare and other sectors. This is building on the acquisition of Chrisal N.V. Belgium concluded earlier in the year, which gives HeiQ expanded access to the healthcare sector through probiotic and synbiotic cleaners.

Goodwill of US$ 7,234,000 was recognized and is attributable to the acquired workforce, anticipated future profit from expansion opportunities and synergies of the business. The goodwill arising from the acquisition has been allocated to the RAS CGUs. Fair value adjustments have been recognized for acquisition-related intangible assets which are in alignment with accounting policies of the Group.

Transaction costs relating to the acquisition of US$50,000 have been charged to the Statement of Comprehensive Income in the period relating to the acquisition of RAS AG.

RAS AG contributed US$2,829,000 of revenue for the period between the date of acquisition and the balance sheet date and US$907,000 of profit before tax. If the acquisition of RAS AG had been completed on the first day of the financial year, Group revenues would have been US$937,000 higher and Group profit attributable to equity holders of the parent would have been US$570,000 higher.

HeiQ Regulatory GmbH, a joint-venture company previously accounted for under the equity-method, became a wholly-owned subsidiary on acquisition of RAS AG.

c. Acquisition of Life Material Technologies Limited

On June 15, 2021, the Company completed the acquisition of 100% of the share capital and voting rights of Life Material Technologies Limited, Hong Kong ("LIFE").

The acquisition was for an upfront consideration of US$6.45 million, with US$2.55 million payable in cash (the "Cash Consideration") and US$3.9 million to be satisfied through the issue of new Ordinary Shares by HeiQ (the "Share Consideration"). Additional earn-out consideration of US$2,038,000 is payable in cash (US$1,400,000) and through the issue of new Ordinary Shares (US$638,000) in 2022. A further US$614,000 working capital adjustment is payable in shares in 2022. An additional US$762,000 is payable annually as remuneration in shares over a five-year period.

5. Business combinations continued

c. Acquisition of Life Material Technologies Limited continued

The Share Consideration was settled on July 9, 2021 by the issue of 1,887,883 new Ordinary Shares ("Consideration Shares") to the sellers of LIFE, at a price of £1.496201 per share, which was the intraday volume-weighted average price (the "VWAP") of HeiQ shares on the London Stock Exchange in the last five trading days preceding the closing of the Acquisition.

LIFE is a materials technology company that has developed a strong portfolio of smart ingredients and formulations with applications in numerous industries. This includes the development and distribution of bio-based antimicrobial additives and treatments used by manufacturers of plastics, coatings, textiles, ceramics and paper, that inhibit or manage bacteria, fungi, algae, and other micro-organisms that come in contact with treated materials. LIFE has one of the broadest technology platforms in the industry, using inorganic, organic and bio-based botanical active substances.

Goodwill of US$5,202,000 was recognized and is attributable to the acquired workforce, anticipated future profit from expansion opportunities and synergies of the business. The goodwill arising from the acquisition has been allocated to the LIFE CGU. Fair value adjustments have been recognized for acquisition-related intangible assets which are in alignment with accounting policies of the Group.

Transaction costs relating to the acquisition of US$110,000 have been charged to the Statement of Comprehensive Income in the period relating to the acquisition of LIFE.

LIFE contributed US$3,367,000 of revenue for the period between the date of acquisition and the balance sheet date and US$419,000 of profit before tax. If the acquisition of LIFE had been completed on the first day of the financial year, Group revenues would have been US$2,072,000 higher and Group profit attributable to equity holders of the parent would have been US$566,000 higher.

d. Summary of acquisitions in 2021

The following table summarizes the consideration paid, the fair value of assets acquired, liabilities assumed, goodwill arising on acquisition and non-controlling interests at the acquisition date:

	Chrisal NV US$'000	RAS AG US$'000	Life Material Technologies Limited US$'000	**Total US$'000**
Consideration:				
Cash paid to shareholders	6,054	1,482	2,550	**10,086**
Shares issued to shareholders	2,983	4,656	3,900	**11,539**
Contingent consideration payable in cash	–	–	1,400	**1,400**
Contingent consideration payable in shares	–	3,232	638	**3,870**
Working capital adjustment payable in shares	–	–	614	**614**
Total Consideration payable	**9,037**	**9,370**	**9,102**	**27,509**
Fair value of net assets acquired:				
Property, plant and equipment	1,872	179	29	**2,080**
Intangible assets	20	159	401	**580**
Other non-current assets	–	–	17	**17**
Inventory	1,277	411	570	**2,258**
Cash	1,773	291	73	**2,137**
Trade and other receivables	874	1,184	1,480	**3,538**
Trade and other payables	(1,900)	(611)	(460)	**(2,971)**
Deferred revenue	(739)	–	–	**(739)**
IAS 19 Pension liability	–	–	(92)	**(92)**
Borrowings	(369)	–	(210)	**(579)**
Income tax liability	(198)	(420)	(20)	**(638)**
Right of use assets	1,375	139	122	**1,636**
Capital lease liability	(1,375)	(139)	(122)	**(1,636)**
Intangible assets identified on acquisition:				
Customer relationship	667	380	610	**1,657**

	Chrisal NV US$'000	RAS AG US$'000	Life Material Technologies Limited US$'000	**Total US$'000**
Brands	521	–	1,048	**1,569**
Technology-based assets	869	1,071	561	**2,501**
Deferred tax liability on intangible assets	(514)	(508)	(111)	**(1,133)**
Total net assets	4,153	2,136	3,896	**10,185**
Non-controlling interests	(1,279)	–	4	**(1,275)**
Goodwill	6,163	7,234	5,202	**18,599**
Total	9,037	9,370	9,102	**27,509**

e. Deferred consideration in relation to acquisitions

The deferred consideration includes earnout payments and a working capital adjustment in relation to the 2021 acquisitions of RAS AG and Life Material Technologies Limited as presented in the table above in note 5d. Since these liabilities are due in 2022, the fair value of the consideration approximates its nominal value.

Additionally, a further amount of deferred consideration pertains to the acquisition of assets from Chem-Tex Inc. in 2017 and is payable other than in a short timeframe. The fair value of the deferred consideration has been discounted using an imputed interest rate of 6% (being the Group's estimated cost of debt) to take into account the time value of money.

The deferred consideration and related financing expense are summarized below:

	Chem-Tex US$'000	RAS AG US$'000	Life Material Technologies Limited US$'000	Total US$'000
As at January 1, 2020	2,103	–	–	2,103
Amortization of fair value discount	245	–	–	245
Consideration settled in cash	(1,267)	–	–	(1,267)
Foreign exchange revaluation	35	–	–	35
As at December 31, 2020	**1,116**	**–**	**–**	**1,116**
Amortization of fair value discount	58	–	–	58
Additions from acquisitions as per note 5d	–	3,232	2,652	5,884
Gain on earnout calculation	–	(80)	–	(80)
Consideration settled in cash	(908)	–	–	(908)
Foreign exchange revaluation	13	–	–	13
As at December 31, 2021	**279**	**3,152**	**2,652**	**6,083**
Current liability	191	3,152	2,652	5,995
Non-current liability	88	–	–	88
Total	**279**	**3,152**	**2,652**	**6,083**

The maturity profile of other non-current liabilities is shown in paragraph (g) "Liquidity risk" of note 24 "Financial risk management" to the Consolidated Financial Statements.

5. Business combinations continued

Business combinations in 2020

f. Reverse acquisition

On December 7, 2020, HeiQ PLC became the legal parent of HeiQ Materials AG by way of reverse acquisition. The cost of the acquisition is deemed to have been incurred by HeiQ Materials AG, the legal subsidiary, in the form of equity instruments issued to the owners of the legal parent. This acquisition has been accounted for as a reverse acquisition.

The accounting policy adopted by the Directors applies the principles of IFRS 3 in identifying the accounting acquirer and the presentation of the Consolidated Financial Statements of the legal parent (HeiQ PLC) as a continuation of the accounting acquirer's Financial Statements (HeiQ Materials AG). This policy reflects the commercial substance of this transaction as the original shareholders of the subsidiary undertakings were the most significant shareholders post transaction, owning 84.8% of the enlarged issued share capital of the Company.

The fair value of the shares in HeiQ Materials AG has been determined from the admission price of the HeiQ PLC shares on Re-admission to trading on the London Stock Exchange's Main Market of £1.12 per share. The value of the consideration shares was £119,571,088 (equivalent to US$156,889,584). The fair value of the notional number of equity instruments that the legal subsidiary would have had to have issued to the legal parent to give the owners of the legal parent the same percentage ownership in the combined entity was 15.2 per cent of the market value of the shares after issues, being £21,428,000 (US$28,124,000). The difference between the notional consideration paid by HeiQ PLC for HeiQ Materials AG and the HeiQ PLC net assets acquired of £20,360,000 (US$26,722,000) has been charged to the Consolidated Statement of Comprehensive Income as a deemed cost of listing amounting to £1,068,000 (equivalent to US$1,402,000) with a corresponding entry to the reverse acquisition reserve.

The transaction costs associated with the reverse acquisition and readmission totaled US$1,871,000 and have been charged to profit and loss.

Details of net assets acquired and the deemed cost of listing are as follows:

	$'000
Consideration effectively transferred	**28,124**
Net assets acquired:	
Cash and cash equivalents	27,105
Trade and other receivables	163
Trade and other payables	(546)
Net assets acquired	**26,722**
Deemed cost of listing	**1,402**

The amounts transferred to the reverse acquisition were as follows:

	$'000
HeiQ equity capital pre-combination	29,095
Deemed cost of acquisition	1,402
Consideration shares issued on acquisition	(156,894)
Retained losses of Company at combination	(515)
Merger reserve at December 31, 2020 and December 31, 2021	**(126,912)**

g. Acquisition of MasFabE

On December 15, 2020, the Group completed the acquisition of a 50.01% interest in a leading Spanish mask manufacturer MasFabEs S.L. for a consideration of €132,751 (equivalent to US$156,570). The company was renamed HeiQ Medica S.L. and will manufacture medical devices with the Group's cutting-edge textile technologies.

The following table summarizes the consideration paid for the goodwill, the fair value of assets acquired, liabilities assumed and non-controlling interests at the acquisition date:

	$'000
Fair value of consideration	**157**
Net assets acquired:	
Property, plant and equipment	1,195
Inventories	1,152
Cash	6
Net working capital	(886)
Deferred tax asset	112
Borrowings	(1,512)
Total identifiable net assets acquired at fair value	**67**
Non-controlling interests	(33)
Goodwill recognized on acquisition	**123**

6. Subsidiaries

Details of the Company's subsidiaries as at December 31, 2021 are as follows:

Company	Country of registration or incorporation	Registered office	Principal activity	Percentage of Ordinary Shares held
HeiQ Materials AG	Switzerland	Rütistrasse 12, 8952 Schlieren Zurich	Development, production and sale of chemicals	100%
HeiQ ChemTex Inc.	United States	2725 Armentrout Dr, Concord, NC 28025	Development, production and sale of chemicals	100%
HeiQ Pty Ltd	Australia	Level 20/181 William Street, Melbourne, VIC 3000	Research and development	100%
HeiQ GrapheneX AG	Switzerland	Rütistrasse 12, 8952 Schlieren Zurich	Inactive	100%
HeiQ Company Limited	Taiwan	No. 14 & 16, Ln. 50, Wufu 1st Rd. Luzhu District, Taoyuan City 33850	Distribution	100%
HX Company Limited	Taiwan	No. 14 & 16, Ln. 50, Wufu 1st Rd. Luzhu District, Taoyuan City 33850	Trading and production	66.70%
HeiQ Medica S.L.	Spain	Plaza de la Estación s/n, 29560 Pizarra	Manufacturer of medical devices	50.1%
HeiQ Iberia Unipessoal Lda	Portugal	Rua Engº Frederico Ulrich, nº 2650, 4470-605 Maia	Sales agency and internal services company	100%
Chrisal NV	Belgium	Priester Daensstraat 9, 3920 Lommel, Belgium	Biotechnology	51%
HeiQ RAS AG	Germany	Rudolf Vogt Straße 8-10, 93053 Regensburg	Materials innovation	100%
HeiQ Regulatory GmbH	Germany	Rudolf Vogt Straße 8-10, 93053 Regensburg	Materials innovation	100%

6. Subsidiaries continued

Company	Country of registration or incorporation	Registered office	Principal activity	Percentage of Ordinary Shares held
HeiQ (China) Material Tech LTD	China	Room 2501, Xuhui Commercial Mansion, No. 168 Yude Road, Shanghai	Distribution	100%
Life Material Technologies Limited	Hong Kong	Alexandra House, 6th Floor, 16-20 Chater Road, Central	Materials technology	100%
Life Natural Limited	Hong Kong	Alexandra House, 6th Floor, 16-20 Chater Road, Central	Inactive	100%
Life-Materials Latam Ltda,	Brazil	Rua Cerro Cora 1851, Vila Romana, São Paulo SP Brasil CEP 05061350	Sales office	85%
LMT Holding Limited	Thailand	222 Lumpini Building 2, 247 Rajdamri Road Lumpini, Phatumwan, Bangkok 10330	Holding	96.45%
Life Material Technologies Limited	Thailand	222 Lumpini Building 2, 247 Rajdamri Road Lumpini, Phatumwan, Bangkok 10330	Trading	99.995%
HeiQ AeoniQ GmbH	Austria	Industriestrasse 35, 3130 Herzogenburg	Materials Innovation	100%

7. Revenue and other operating income

The Group's activities are materials innovation which focuses on scientific research, manufacturing and consumer ingredient branding. The primary source of revenue is the production and sale of functional ingredients, materials and finished goods. Other sources of revenues include research and development services as well as laboratory work. Revenues were mainly generated in the regions of Europe, North & South America and Asia.

The following table reconciles HeiQ Group's revenue for the periods presented:

Revenues by function	**Year ended December 31, 2021 US$'000**	Year ended December 31, 2020 US$'000
Comfort	**12,979**	7,356
Hygiene	**29,314**	29,151
Protection	**2,076**	3,879
Resource Efficiency	**13,505**	10,015
Total revenue	**57,874**	50,401

Revenues by form	**Year ended December 31, 2021 US$'000**	Year ended December 31, 2020 US$'000
Revenue recognized at point in time		
Functional ingredients	**43,661**	42,023
Functional materials	**850**	764
Functional consumer goods	**10,069**	7,444
Services, royalties and others	**2,692**	170
Revenue recognized over time		
Licenses	**602**	–
Total revenue	**57,874**	50,401

Revenue by region	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
North & South America	**21,689**	19,813
Asia	**19,636**	19,887
Europe	**16,237**	10,429
Others	**312**	272
Total revenue	**57,874**	50,401

During the year ended December 31, 2021, no customers individually totaled more than 10% of total revenues (2020: none).

Other operating income	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Foreign exchange gains	**5,032**	3,986
Other operating income	**1,394**	758
Total other operating income	**6,426**	4,744

Other income	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Gain on disposal of property, plant and equipment	**54**	–
Gain on earnout consideration payable (note 5e)	**80**	–
Other non-operating income	**65**	–
Total other income	**199**	–

8. Expenses by nature

Cost of goods sold	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 (Restated) US$'000
Material expenses	**24,581**	17,452
Personnel expenses	**2,164**	1,279
Depreciation of property, plant and equipment	**706**	382
Other costs of goods	**3,447**	3,155
Total cost of goods sold	**30,898**	22,268

Selling and general administration expense	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Personnel expenses	**13,074**	9,091
Depreciation of property, plant and equipment	**549**	394
Amortization	**758**	110
Depreciation of right-of-use assets	**855**	368
Other	**9,229**	4,913
Total selling and general administration expense	**24,465**	16,117

Notes to the Consolidated Financial Statements continued

For the year ended December 31, 2021

8. Expenses by nature continued

Personnel expenses	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Wages and salaries	12,708	8,290
Social security and other payroll taxes	1,387	415
Pension costs	645	448
Share-based payments	498	1,217
Total personnel expenses	15,238	10,370
The average monthly number of employees was as follows:	221	97

Other operating expenses	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Foreign exchange losses	4,671	5,124
Impairment expense	144	–
Other	1,005	3
Total other operating expenses	5,820	5,127

Other operating expenses	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Loss on disposal of property, plant and equipment	20	46
Other non-recurring costs	341	23
Total other costs	361	69

Auditor's remuneration	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Audit of company	231	108
Audit of subsidiaries	84	–
Total audit	315	108
Audit related assurance services	6	–
Other assurance services	–	115
Total assurance services	6	115

9. Taxation

For the year ending December 31, 2021, the Group had a tax expense of US$212,000 (2020: US$2,112,000). The effective tax rate was (7.9%) (2020: 29.5%). The effective tax rate was primarily impacted by temporary differences.

The components of the provision for taxation on income included in the "Statement of Profit or Loss and Other Comprehensive Income" are summarized below:

Current income tax expense	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Swiss corporate income taxes	(282)	304
United States state and federal taxes	(33)	1,112
Taiwan corporate income taxes	200	161
Belgium corporate income taxes	186	–
Germany corporate income taxes	301	–
Others	39	–
Total current income tax expense	**411**	1,577
Deferred income tax expense		
Switzerland	(190)	588
China	(146)	–
United States	138	–
Spain	108	–
Others	(109)	(53)
Total deferred income tax expense	**(199)**	535
Total income tax expense	**212**	2,112

Tax liability	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Opening balance – (prepaid taxes)	1,495	(42)
Assumed on business combinations	638	–
Income tax expense for the year	411	1,577
Taxes paid	(2,462)	(48)
Foreign currency differences	(31)	8
Closing balance	**51**	1,495

9. Taxation continued

The differences between the statutory income tax rate and the effective tax rates are summarized as follows:

	Year ended December 31, 2021	
	US$'000	
Expected tax at statutory Swiss income tax rate of 20%	**537**	**20.0%**
Increase/(decrease) in tax resulting from:		
Effect of different tax rates in foreign jurisdictions	**25**	**0.9%**
Tax credits	**(58)**	**(2.1%)**
Unrecognized tax losses	**378**	**13.6%**
Non-deductible expenditure	**58**	**2.2%**
Tax exempt income	**(105)**	**(3.9%)**
Temporary differences	**(614)**	**(22.9%)**
Other – net	**(9)**	**0.1%**
Total income tax expense	**212**	**7.9%**

	Year ended December 31, 2020	
	US$'000	
Expected tax at statutory Swiss income tax rate of 20%	1,432	20.0%
Increase/(decrease) in tax resulting from:		
Effect of different tax rates in foreign jurisdictions	175	2.5%
Tax credits	(60)	(0.8%)
Recognized tax losses	(329)	(4.6%)
Non-deductible expenditure	567	7.9%
Other – net	327	4.5%
Total income tax expense	2,112	29.5%

The Group had net deferred tax liabilities of US$1,193,000 at December 31, 2021 (2020: US$31,000). The deferred tax assets relate to taxable temporary differences.

The components of the net deferred income tax assets included in non-current assets are as follows:

	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Deferred tax assets		
Pension fund obligations	**429**	655
Tax losses	**178**	171
Share-based payments	**88**	–
Others	**6**	–
Total deferred tax assets	**701**	826
Deferred tax liabilities		
Capital allowances and depreciation	**(1,894)**	(857)
Deferred tax liabilities	**(1,894)**	(857)
Net deferred tax assets (liabilities)	**(1,193)**	(31)

As at December 31, 2021, the Group had approximately US$178,000 of tax losses available to be carried forward against future profits (2020: US$171,000).

In applying judgment in recognizing deferred tax assets, management has critically assessed all available information, including future business profit projections and the track record of meeting forecasts. Management expects the deferred tax asset to be substantially recovered in 2022.

Some tax losses were not recognized as deferred tax assets. During the period ended 31 December 2021, such tax losses amounted to US$378,000 (2020: US$42,000). They arose from aggregated losses of US$1,134,000 (2020: US$154,000).

10. Earnings per share

	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Profit after tax attributable to owners of the Company	**2,676**	5,125
Basic earnings per share (cents)	**2.07**	4.53
Diluted earnings per share (cents)	**2.01**	4.32
Basic weighted average shares in issue	**128,871,639**	113,143,731
Diluted weighted average shares in issue	**132,718,333**	118,666,601

Basic earnings per share is calculated by dividing the profit/loss after tax attributable to the equity holders of the Company by the weighted average number of shares in issue during the year.

Diluted earnings per share is calculated by dividing the profit/loss attributable to the equity holders of the Company by the weighted average number of Ordinary Shares outstanding during the year plus the weighted average number of Ordinary Shares that would be issued on conversion of all the dilutive potential Ordinary Shares into Ordinary Shares.

In calculating the weighted average number of Ordinary Shares outstanding (the denominator of the earnings per share calculation) during the period in which the reverse acquisition occurs:

(a) the number of Ordinary Shares outstanding from the beginning of that period to the acquisition date shall be computed on the basis of the weighted average number of Ordinary Shares of the legal acquiree (accounting acquirer) outstanding during the period multiplied by the exchange ratio established in the merger agreement; and

(b) the number of Ordinary Shares outstanding from the acquisition date to the end of that period shall be the actual number of Ordinary Shares of the legal acquirer (the accounting acquiree) outstanding during that period.

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For the year ended December 31, 2021

11. Intangible assets

Cost	Goodwill US$'000	Internally developed assets US$'000	Brand names and customer relations US$'000	Acquired technologies US$'000	Other intangible assets US$'000	Total US$'000
As at January 1, 2020	3,393	1,128	295	–	417	5,233
Additions through business combinations	123	–	–	–	–	123
Additions arising from internal development	–	602	–	–	–	602
Other acquisitions	–	–	–	–	33	33
Currency translation differences	–	121	–	–	41	162
As at December 31, 2020	**3,516**	**1,851**	**295**	**–**	**491**	**6,153**
Reclasses*	–	(725)	–	–	725	–
Additions through business combinations	18,599	–	3,226	2,501	580	24,906
Additions arising from internal development	–	2,390	–	–	–	2,390
Other acquisitions	–	–	–	–	579	579
Currency translation differences	–	(7)	–	–	(43)	(50)
As at December 31, 2021	**22,115**	**3,509**	**3,521**	**2,501**	**2,332**	**33,978**
Amortization						
As at January 1, 2020	–	384	78	–	249	711
Amortization for the year	–	11	29	–	70	110
Currency translation differences	–	37	–	–	31	68
As at December 31, 2020	**–**	**432**	**107**	**–**	**350**	**889**
Reclasses*	–	(19)	–	–	19	–
Amortization for the year	–	50	367	177	164	758
Impairment expense for the year	123	21	–	–	–	144
Currency translation differences	–	(10)	–	–	(15)	(25)
As at December 31, 2021	**123**	**474**	**474**	**177**	**518**	**1,766**
Net book value						
As at December 31, 2021	**21,992**	**3,035**	**3,047**	**2,324**	**1,814**	**32,212**
As at December 31, 2020	**3,516**	**1,419**	**188**	**–**	**141**	**5,264**

*Regulatory registrations have been reclassed from internally developed assets to other intangible assets.

Internally generated assets represent expenditure incurred on development projects and IT.

Other intangible assets include acquired rights, licenses, patent costs, concessions, website designs and domains and trademarks.

Goodwill

Goodwill acquired in a business combination is allocated, at acquisition, to the cash-generating units (CGUs) that are expected to benefit from that business combination. Management considers that the goodwill is attributable to the textile innovation CGU, because that is where the benefits are expected to arise from expansion opportunities and synergies of the business. The Directors consider that the Group has one reportable segment, that of textile innovation focused on scientific research, specialty materials manufacturing and consumer ingredient branding.

The Group tests goodwill annually for impairment or more frequently if there are indications that these assets might be impaired. The recoverable amounts of the CGU are determined from fair value less costs to sale. The value of the goodwill comes from the future potential of the assets rather than using the assets as they are (i.e. there is assumed expansionary capex which supports growth in revenues and the value of the business and therefore goodwill).

The key assumptions for the fair value less costs to sale approach are those regarding sales prices, margins and a discount rate.

The Group monitors its pre-tax Weighted Average Cost of Capital and those of its competitors using market data. In considering the discount rate applying to the CGU, the Directors have considered the relative size and risks of its CGU.

The impairment review uses a discount rate adjusted for post-tax cash flows. The Group prepares cash flow forecasts derived from the most recent financial plan approved by the Board and extrapolates revenues, gross and net margins and cash flows for the following five years based on forecast growth rates of the CGU. Cash flows beyond this period are also considered in assessing the need for any impairment provisions.

A summary of the key assumptions used in such impairment testing is set out in note 11 above. With the exception of the goodwill recognized in respect of the acquisition of MasFabEs, no impairment was considered necessary as a result of these tests.

In the case of MasFabEs, the Company tested goodwill for impairment and determined that the recoverable amount recognized on acquisition was less than its carrying amount and accordingly an impairment provision of $123,000 was made in the year ended December 31, 2021.

Impairment of intangible assets

IFRS requires the Directors to undertake an annual test for impairment of indefinite lived assets and, for finite lived assets, to test for impairment if events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

Impairment testing is an area involving judgment in determining estimates, requiring assessment as to whether the carrying value of assets can be supported by the net present value of future cash flows derived from such assets using cash flow projections which have been discounted at an appropriate rate. In calculating the net present value of the future cash flows, certain assumptions are required to be made in respect of highly uncertain matters including management's expectations of:

- gross margins;
- the level of capital expenditure to support long-term growth; and
- the selection of discount rates to reflect the risks involved.

The Directors prepare and approve cash flow projections which are used in the fair value calculations. Changing the assumptions selected by the Directors, in particular the discount rate, gross margins and growth rate assumptions used in the cash flow projections, could significantly affect their impairment evaluation and hence the Group's results.

The sensitivity of impairment tests to changes to underlying assumptions is summarized below. Impairment of goodwill would result from the following changes to assumptions:

Assumption	Chem-Tex		Chrisal NV		RAS AG		Life Materials	
	Existing	Sensitivity	Existing	Sensitivity	Existing	Sensitivity	Existing	Sensitivity
Gross margin	33%	27%	59%	58%	91%	71%	58%	28%
Capex (annual spend)	US$ 207,000	US$ 1,000,000	US$ 138,000	US$ 180,000	US$ 57,000	US$ 1,400,000	US$ 91,000	US$ 2,800,000
Discount factor	14%	22%	14%	15%	14%	23%	14%	38%

Growth is calculated in accordance with the commercial plan for the financial years 2022, 2023 and 2024, and 2% annually in 2025 and 2026.

Internally developed assets and other intangibles with finite lives

The Group tests internally developed assets and other intangibles with finite lives for impairment only if there are indications that these assets might be impaired. The Company has concluded that no impairment is necessary. The Group has processes in place for continually reviewing development expenditure to ensure that projects under development are still viable.

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12. Property, plant and equipment

Cost	Machinery and equipment US$'000	Motor vehicles US$'000	Computers and software US$'000	Furniture and fixtures US$'000	Land and buildings US$'000	Total US$'000
As at January 1, 2020	5,189	343	665	100	–	6,297
Acquisition on business combination	1,224	–	1	12	–	1,237
Additions	629	191	77	35	–	932
Disposals	(628)	(46)	(2)	(18)	–	(694)
Currency translation differences	365	4	69	3	–	441
As at December 31, 2020	**6,779**	**492**	**810**	**132**	**–**	**8,213**
Acquisition on business combination	191	19	24	171	1,675	2,080
Additions	596	67	104	213	14	994
Disposals	(30)	(37)	–	(15)	(68)	(150)
Currency translation differences	(248)	(5)	(24)	(27)	(98)	(402)
As at December 31, 2021	**7,288**	**536**	**914**	**474**	**1,523**	**10,735**
Depreciation						
As at January 1, 2020	1,917	180	285	31	–	2,413
Acquisition on business combination	42	–	–	–	–	42
Charge for the year	538	84	142	12	–	776
Eliminated on disposal	(607)	(24)	–	(7)	–	(638)
Currency translation differences	112	2	37	2	–	153
As at December 31, 2020	**2,002**	**242**	**464**	**38**	**–**	**2,746**
Charge for the year	797	118	168	55	117	1,255
Eliminated on disposal	(13)	(26)	–	(7)	–	(46)
Currency translation differences	(63)	(4)	(13)	–	(5)	(85)
As at December 31, 2021	**2,723**	**330**	**619**	**86**	**112**	**3,870**
Net book value						
As at December 31, 2021	**4,565**	**206**	**295**	**388**	**1,411**	**6,865**
As at December 31, 2020	**4,777**	**250**	**346**	**94**	**–**	**5,467**

13. Right-of-use assets

Cost	Land and buildings US$'000	Motor vehicles US$'000	Office equipment US$'000	Total US$'000
As at January 1, 2020	3,757	111	22	3,890
Additions	76	–	32	108
Disposals due to expiry of lease	(306)	(43)	(14)	(363)
Currency translation differences	174	8	1	183
As at December 31, 2020	**3,701**	**76**	**41**	**3,818**
Additions through business combinations	1,186	300	150	1,636
Additions	5,147	289	393	5,829
Disposals due to expiry of lease	–	(33)	(9)	(42)
Currency translation differences	(120)	(21)	2	(139)
As at December 31, 2021	**9,914**	**611**	**577**	**11,102**
Depreciation				
As at January 1, 2020	1,077	80	19	1,176
Depreciation for the year	345	16	7	368
Disposals due to expiry of lease	(306)	(43)	(14)	(363)
Currency translation differences	66	7	–	73
As at December 31, 2020	**1,182**	**60**	**12**	**1,254**
Depreciation for the year	655	89	111	855
Disposals due to expiry of lease	–	(32)	(9)	(41)
Currency translation differences	(34)	(8)	(3)	(45)
As at December 31, 2021	**1,803**	**109**	**111**	**2,023**
Net book value				
As at December 31, 2021	**8,111**	**502**	**466**	**9,079**
As at December 31, 2020	**2,519**	**16**	**29**	**2,564**

Future minimum lease payments associated with these leases were as follows:

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Not later than one year	**1,115**	385
Later than one year and not later than five years	**3,689**	1,346
Later than five years	**5,525**	1,162
Total minimum lease payments	**10,329**	2,893
Less: Future finance charges	**(1,099)**	(240)
Present value of minimum lease payments	**9,230**	2,653
Current liability	**1,054**	349
Non-current liability	**8,176**	2,304
Present value of minimum lease payments	**9,230**	2,653

Notes to the Consolidated Financial Statements continued

For the year ended December 31, 2021

14. Other non-current assets

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Deposits	**140**	55
Amounts due from third parties	**–**	151
Other non-current assets	**193**	–
Other non-current assets	**333**	206

15. Inventories

	As at December 31, 2021 US$'000	As at December 31, 2020 (Restated) US$'000
Functional ingredients	**7,480**	10,209
Functional materials	**4,310**	1,289
Functional consumer goods	**1,822**	2,042
Services	**158**	–
Total inventories	**13,770**	13,540

16. Trade receivables

The majority of trade receivables are current, and the Directors believe these receivables are collectible. The Directors consistently assess the collectability of these receivables. As at December 31, 2021, the Directors considered a portion of these receivables uncollectible and recorded a provision in the amount of US$1,473,000 (2020: US$551,000).

Trade receivables	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Not past due	**7,623**	3,975
<30 days	**2,930**	1,304
31-60 days	**55**	763
61-90 days	**1,115**	115
91-120 days	**351**	482
>120 days	**7,449**	7,349
Total trade receivables	**19,523**	13,988
Provision for expected credit loss	**(1,473)**	(551)
Total trade receivables (net)	**18,050**	13,437

The Group uses a simplified approach to recognizing lifetime expected losses on trade and other receivables. Expected losses consider payment performance history, external information available regarding credit ratings as well as future expected credit losses.

The provision for expected loss rates is based on the Group's historical credit loss record. Most significantly, in the case of take-or-pay contracts, the rate of provision is 5% for amounts more than one year past due, 20% for amounts more than two years past due and 25% for amounts more than three years past due.

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Other receivables – from tax authorities	**1,734**	1,372
Prepayments and other receivables	**4,541**	1,237
Total other receivables and prepayments	**6,275**	2,609

17. Share capital and share options

Movements in the Company's share capital were as follows:

	Note	Number of shares No.	Share capital US$'000	Share premium US$'000	Totals US$'000
Balance as of January 1, 2020		2,668,999	350	1,305	1,655
Consolidation of shares		(1,779,346)	–	–	–
Placing of shares		11,789,142	4,641	12,684	17,325
Subscription for shares		6,068,000	2,389	6,529	8,918
Issue of shares to acquire HeiQ Materials AG		106,759,900	42,027	114,865	156,892
Shares issued in lieu of fees		385,209	152	414	566
Costs of share issues		–	–	(1,260)	(1,260)
Balance as at December 31, 2020		**125,891,904**	**49,559**	**134,537**	**184,096**
Issue of shares to acquire Chrisal NV	5a	1,101,928	456	2,526	2,982
Issue of shares to acquire RAS AG	5b	1,701,821	710	3,946	4,656
Issue of shares to acquire Life Materials	5c	1,887,883	798	3,182	3,980
Balance as at December 31, 2021		**130,583,536**	**51,523**	**144,191**	**195,714**

The par value of all shares is £0.30. All shares in issue were allotted, called up and fully paid.

As more fully described in note 5 above, the Company issued new Ordinary Shares for the following acquisitions:

i. On March 9, 2021, the Company acquired a 51% interest in Chrisal N.V. payable partly in cash (€5,000,000, equivalent to approximately US$6,054,000) and partly by the issue of 1,101,928 new Ordinary Shares for €2,500,000 (US$2,982,000), equivalent to a total consideration of US$9,036,000.

ii. On April 29, 2021, the Company acquired a 100% interest in RAS AG for a purchase consideration of €5.1 million (approximately US$6.1 million), with €1.25 million (US$1.48 million) payable in cash and €3.85 million (US$4.66 million) through the issue of 1,701,821 new Ordinary Shares by the Company.

iii. The Company issued a further 1,887,883 new Ordinary Shares on July 9, 2021 to the sellers of LIFE, at a price of £1.496201 per share, equivalent to US$4,085,000.

Share Option Scheme

The Company has adopted the HeiQ PLC Option Scheme.

Under the Option Scheme, awards may be made only to employees and Executive Directors. The Board will administer the Option Scheme with all decisions relating to awards made to Executive Directors taken by the Remuneration Committee.

Awards under the plan will be market value options, but participants resident in jurisdictions where local securities laws or other regulations are considered problematic may be awarded cash-based equivalents. Any awards made are not pensionable.

All awards made will be subject to one or more performance conditions at the discretion of the Board. Ordinary Shares received on exercise of any options awarded under the Option Scheme may be required to be held for a period of time before they can be disposed of (other than disposals to satisfy any tax payable on exercise).

The total number of Ordinary Shares which can be issued under the Option Scheme (together with any other employees' share scheme operated by the Company) may not exceed 10% of the Company's Ordinary Share capital from time to time.

17. Share capital and share options continued

A total of 6,260,000 awards were made under the Option Scheme pursuant to Re-admission on December 7, 2020.

The key performance indicators attaching to these awards relate to targets for sales growth (65% of the award) and operating margin (35% of the award) over a period of three years.

An option-holder has no voting or dividend rights in the Company before the exercise of a share option.

The weighted average share price at grant date of options granted at grant date was £1.12 and the estimated fair value of each share option granted was £0.269. This estimated fair value was calculated by applying a Black–Scholes option pricing model. A 0.25% risk-free interest rate and an expected volatility of the Company's share price has been used in these calculations.

On October 19, 2021 a total of 2,447,658 share options were issued, with service periods covering January 2022 to December 2024 and an exercise price of £0.903 per share option.

No options were exercised, forfeited or lapsed during the year ended December 31, 2021. Accordingly, as at December 31, 2021 8,707,658 options remained in place (2020: 6,200,000) out of which 5,204,978 options are expected to vest (2020: 6,200,000), with a weighted average exercise price of £1.13 (2020: £1.23).

The expense and equity reserve arising from these share-based payment transactions recognized in the year ended December 31, 2021 was US$424,000 (year ended December 31, 2020: US$50,000).

An additional expense of US$74,000 relates to share-based payments payable in 2022 as deferred consideration in relation to the acquisition of Life Materials AG.

Other share-based transactions

During the year ended December 31, 2020, HeiQ Materials AG issued 18,000 shares to employees in respect of contractual obligations for a total consideration of US$1,167,000.

18. Reserves

The share-based payment reserve arises from the requirement to fair value the issue of share options at grant date. Further details of share options are included at note 17.

The currency translation reserve represents cumulative foreign exchange differences arising from the translation of the financial statements of foreign subsidiaries and is not distributable by way of dividends.

The share premium account represents the amount received on the issue of Ordinary Shares by the Company in excess of their nominal value and is non-distributable.

The other reserve comprises the cumulative re-measurement of defined benefit obligations and plan assets to fair value and which are recognized as a component of other comprehensive income. Such actuarial gains and losses from defined benefit pension plans are not reclassified to profit or loss in subsequent periods.

The retained deficit comprises all other net gains and losses and transactions with owners not recognized elsewhere.

The merger reserve was created in accordance with IFRS3 "Business Combinations". The merger reserve arises due to the elimination of the Company's investment in HeiQ Materials AG. Since the shareholders of HeiQ Materials AG became the majority shareholders of the enlarged Group, the acquisition is accounted for as though there is a continuation of the legal subsidiary's financial statements. In reverse acquisition accounting, the business combination's costs are deemed to have been incurred by the legal subsidiary.

19. Pensions and other post-employment benefit plans

The Group operates a defined benefit pension plan in Switzerland, which requires contributions to be made to a separately administered fund. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

Correspondingly, the value of the defined benefit obligation at valuation date is equal to the present value of the accrued prorated service considering expected salary at eligibility date and the future pension increase.

The pension scheme was with Swisscanto pension fund ("Swisscanto Sammelstiftung") until December 31, 2021 and with AXA pension fund from January 1, 2022 following a change in pension fund provider. The Directors have adopted the actuarial valuation as of January 1, 2022.

Pension plan description

The pension plans grant disability and death benefits which are defined as a percentage of the salary insured. Although the Swiss plan operates like a defined contribution plan under local regulations, it is accounted for as a defined benefit pension plan under IAS19 'Employee Benefits' because of the need to accrue a minimum level of interest on the mandatory part of the pension accounts. Upon reaching the retirement age, the savings capital will be converted with a fixed conversion rate into an old-age pension. In the event that an employee leaves employment prior to reaching a pensionable age, the cumulative balance of the savings account is withdrawn from the pension plan and invested into the pension plan of the employee's new employer.

Regulatory framework

Pension plan legal structure

HeiQ Materials AG is affiliated to a collective foundation. The collective foundation operates one defined benefit pension plan for HeiQ Materials AG. Under Swiss law, all employees are required to be a member of the pension plan. There are minimum benefits requested by law (for old-age, disability, death and termination). The pension plans cover more than legally requested. Each affiliated company has a pension plan committee. The committee is represented by 50% of employer representatives and the remaining 50% are employee representatives.

Responsibilities of the board of trustees (and/or the employer on the board of trustees)

The highest corporate body of the collective foundation is the board of trustees. The board of trustees is elected out of the affiliated companies and is also represented by 50% of employee and employer representatives (on the level of the collective foundation). This board handles the general management of the pension scheme, ensures compliance with the statutory requirements, defines the strategic objectives and policies of the pension scheme and identifies the resources for their implementation. This board decides also on the asset allocation and is responsible to the authorities for the correct administration of the collective foundation.

Special situation

The pension scheme has no minimum funding requirement (when the pension fund is in a surplus position), although the pension scheme has a minimum contribution requirement as specified below. Under local requirements, where a pension fund is operated in a surplus position, limited restrictions apply in term of the trustee's ability to apply benefits to the members of the locally determined "free reserves". In instances where the pension fund enters into an underfunded status the active members, along with the employer, are required to make additional contributions until such time the pension fund is in a fully funded position.

Funding arrangements that affect future contributions

Swiss law provides for minimum pension obligations on retirement. Swiss law also prescribes minimum annual funding requirements. An employer may provide or contribute a higher amount than as specified under Swiss law – such amounts are specified under the terms and conditions of each of the Swiss employee's individual terms and conditions of employment.

In addition, employers are able to make one-off contributions or prepayments to these funds. Although these contributions cannot be withdrawn, they are available to the Company to offset its future employer cash contributions to the plan. Although a surplus can exist in the fund, Swiss law requires minimum annual funding requirements to continue.

For the active members of the pension plan, annual contributions are required by both the employer and employee. The employer contributions must be at least equal to the employee contributions, but may be higher, separately mentioned in the constitution of the pension plan.

Minimum annual contribution obligations are determined with reference to an employee's age and current salary; however, as indicated above, these can be increased under the employee's terms and conditions of employment.

In the event of the winding up of HeiQ Materials AG, or the pension fund, HeiQ Materials AG has no right to any refund of any surplus in the pension fund. Any surplus balance is allocated to the members (active and pensioners).

General risk

The Group faces the risk that its equity ratio can be affected by a poor performance of the assets of the pension fund or change of assumptions. Therefore, sensitivities of the main assumptions have been calculated and disclosed (see below).

19. Pensions and other post-employment benefit plans continued

The following tables summarize the components of net benefit expense recognized in the statement of profit or loss and the funded status and amounts recognized in the statement of financial position for the plan:

Net benefit obligations

The components of the net defined benefits obligations included in non-current liabilities are as follows:

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Fair value of plan assets	**10,858**	6,311
Defined benefit obligation	**(13,003)**	(9,587)
Funded status (net liability)	**(2,146)**	(3,276)
Duration (years)	**16.5**	18.9
Expected benefits payable in following year	**(393)**	(269)

Development of obligations and assets	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Present value of funded obligations, beginning of year	**(9,588)**	(6,374)
Employer service cost	**(521)**	(391)
Employee contributions	**(342)**	(237)
Past service cost	**28**	–
Curtailments/settlements	**65**	–
Interest cost	**(14)**	(21)
Benefits paid	**(2,589)**	(1,044)
Actuarial (loss)/gain on benefit obligation	**(256)**	(809)
Currency (loss)/gain	**214**	(711)
Present value of funded obligations, end of year	**(13,003)**	(9,587)
Defined benefit obligation participants	**(13,003)**	(8,942)
Defined benefit obligation pensioners	**–**	(645)
Present value of funded obligations, end of year	**(13,003)**	(9,587)
Fair value of plan assets, beginning of year	**6,311**	4,454
Expected return on plan assets	**10**	14
Employer's contributions	**342**	237
Employees' contributions	**342**	237
Benefits (paid)/refunded	**2,589**	1,044
Admin expense	**(20)**	(15)
Actuarial gain/(loss) on plan assets	**1,380**	(141)
Currency gain/(loss)	**(96)**	481
Fair value of plan assets, end of year	**10,858**	6,311

Movements in net liability recognized in the statement of financial position:

	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Net liability, beginning of year	**(3,276)**	(1,920)
Expense recognized in profit and loss	**(453)**	(413)
Employer's contributions (following year expected contributions)	**340**	237
Prepaid (accrued) pension cost:	**111**	176
– operating income (expense)	**(107)**	(169)
– finance expense	**(4)**	(7)
Total gains recognized within other comprehensive income	**1,124**	(950)
Currency loss	**120**	(230)
Net liability, end of year	**(2,146)**	(3,276)
Actual return on plan assets	**16.69%**	-2.37%
Expected employer's cash contributions for following year	**361**	295

The assets of the scheme are invested on a collective basis with other employers. The allocation of the pooled assets between asset categories is as follows:

Asset allocation	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Cash	**3.6%**	0.5%
Bonds	**31.7%**	24.5%
Equities	**34.8%**	34.5%
Property (incl. mortgages)	**27.0%**	24.2%
Other	**2.9%**	16.3%
Total	**100.0%**	100.0%

Amounts recognized in other comprehensive income	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Actuarial (losses)/gains arising from plan experience	**(1,449)**	(553)
Actuarial gains/(losses) arising from demographic assumptions	**744**	–
Actuarial gains/(losses) arising from financial assumptions	**449**	(256)
Re-measurement of defined benefit obligations	**(256)**	(809)
Re-measurement of assets	**1,380**	(141)
Deferred tax asset recognized	**(225)**	286
Other	**–**	(96)
Total recognized in OCI	**899**	(760)

19. Pensions and other post-employment benefit plans continued

Principal actuarial assumptions (beginning of year):

The principal assumptions used in determining pension and post-employment benefit obligations for the plan are shown below:

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Discount rate	0.35%	0.30%
Interest credit rate	1.00%	1.00%
Expected net return on plan assets	0.35%	0.30%
Average future salary increases	2.00%	1.50%
Future pension increases	0.00%	0.00%
Mortality tables used	BVG 2020 GT	BVG 2015 GT
Average retirement age	65/64	65/64
Expected life expectation at regular retirement age (male/female)	22.70/25.48	22.83/25.85

Sensitivities

A quantitative sensitivity analysis for significant assumptions is as follows:

Impact on defined benefit obligation	**As at December 31, 2021 US$'000**	As at December 31, 2020 US$'000
Discount rate + 0.25%	**(524)**	(401)
Discount rate – 0.25%	**560**	432
Salary increase + 0.25%	**72**	61
Salary increase – 0.25%	**(70)**	(59)
Pension increase + 0.25%	**278**	216
Pension decrease – 0.25% (not lower than 0%)	**–**	–

A negative value corresponds to a reduction of the defined benefit obligation, a positive value to an increase of the defined benefit obligation.

The sensitivity analyses above have been determined based on a method that extrapolates the impact on the defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period. The sensitivity analyses are based on a change in a significant assumption, keeping all other assumptions constant. The sensitivity analyses may not be representative of an actual change in the defined benefit obligation as it is unlikely that changes in assumptions would occur in isolation from one another.

Other pension plans

Life Materials Technologies Limited, Thailand, also has a pension scheme which gives rise to defined benefit obligations under IAS 19. This pension plan contributed a net defined benefit obligation of US$92,000 to the net assets acquired in the business combination. Pension expense in profit and loss was US$43,000 which results in a US$135,000 net defined liability as at December 31, 2021.

20. Other non-current liabilities

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Defined benefit obligation IAS 19 Switzerland (note 19)	**2,146**	3,276
Defined benefit obligation IAS 19 Thailand (note 19)	**135**	–
Deferred consideration in relation to Chemtex acquisition (see note 5e)	**88**	149
Other	**250**	–
Other non-current liabilities	**2,619**	3,425

21. Borrowings and financing

As at December 31, 2021, the Group's borrowings consist primarily of:

- A credit facility taken out in 2021 which incurs interest at 1% and is secured by buildings. It is repayable in 2022. As at December 31, 2021, €63,000 (US$71,000) is outstanding.
- A bank loan taken out in October 2020 which incurs interest at 2.25% and which is secured on property owned by a company which is controlled by a minority shareholder of HeiQ Medica. It is repayable in equal monthly instalments of €8,000 (US$9,500) over eight years up to September 2028. As at December 31, 2020, €685,000 (US$779,000) is outstanding – the short-term portion being €95,000 (US$108,000) and the long-term portion being €590,000 (US$671,000).
- A loan of €459,000 (US$522,000) payable to a company controlled by a minority shareholder of HeiQ Medica. The loan is repayable by December 31, 2022 and does not incur any interest.

In 2020, the Group's borrowings consisted primarily of:

- A bank loan taken out in October 2020 which incurs interest at 2.25% and which is secured on property owned by a company which is controlled by a minority shareholder of HeiQ Medica. It is repayable in equal monthly instalments of €8,000 (US$9,500) over eight years up to September 2028. As at December 31, 2020, €777,000 (US$951,000) is outstanding – the short-term portion being €93,000 (US$114,000) and the long-term portion being €684,437 (US$838,000).
- A loan of €459,000 (US$562,000) payable to a company controlled by a minority shareholder of HeiQ Medica. The loan is repayable by December 31, 2022 and does not incur any interest.
- A short-term bank loan of €45,000 (US$55,000) which was repaid in January 2021 and did not incur any interest.

The following table provides a reconciliation of the Group's future maturities of its total borrowings for each year presented:

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Not later than one year	**1,004**	173
Later than one year but less than five years	**457**	1,043
After more than five years	**213**	357
Total borrowings	**1,674**	1,573

The following table represents the Group's finance costs for each year presented:

	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Amortization of deferred finance costs – acquisition costs	**58**	245
Lease finance expense	**145**	52
Interest on borrowings	**108**	108
Bank fees	**55**	46
Loss on foreign currency transactions	**231**	733
Total finance costs	**597**	1,184

The following table represents the Group's finance income for each year presented:

	Year ended December 31, 2021 US$'000	Year ended December 31, 2020 US$'000
Interest income	**4**	–
Gains on foreign currency transactions	**516**	68
Other	**14**	–
Total finance income	**534**	68

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For the year ended December 31, 2021

22. Current liabilities

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Trade payables	**4,090**	3,590
Payables to tax authorities	**1,167**	485
Other payables	**4,102**	1,740
Total trade and other payables	**9,359**	5,815

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Costs of goods sold	**2,481**	1,093
Personnel expenses	**1,525**	2,052
Other operating expenses	**532**	69
Total accrued liabilities	**4,538**	3,214

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Prepayments from customers in relation to sales contracts	**1,774**	–
Total deferred revenue	**1,774**	–

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Deferred consideration in relation to acquisitions (note 5e)	**5,995**	967
Deferred consideration in relation to share-based payments (note 17)	**74**	–
Other current liabilities	**6,069**	967

23. Fair value and financial instruments

a) Fair value

The fair value of an asset or liability is the price that would be received to sell that asset or paid to transfer that liability in an orderly transaction occurring in the principal market (or most advantageous market in the absence of a principal market) for such asset or liability. In estimating fair value, the Directors utilize valuation techniques that are consistent with the market approach, the income approach and/or the cost approach. Such valuation techniques are consistently applied. Inputs to valuation techniques include the assumptions that market participants would use in pricing an asset or liability. IFRS 13 "Fair Value Measurement" establishes a fair value hierarchy for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is defined as follows:

Level 1: Inputs are unadjusted, quoted prices in active markets for identical assets at the measurement date.

Level 2: Inputs (other than quoted prices included in Level 1) can include the following:
- observable prices in active markets for similar assets;
- prices for identical assets in markets that are not active;
- directly observable market inputs for substantially the full term of the asset; and
- market inputs that are not directly observable but are derived from or corroborated by observable market data.

Level 3: Unobservable inputs which reflect the Directors' best estimates of what market participants would use in pricing the asset at the measurement date.

All financial instruments measured at fair value use Level 2 valuation techniques for each of the years ended December 31, 2020 and December 31, 2021.

Level 2 fair value measurements are those including inputs other than quoted prices included within Level 1 that are observable for the asset or liability directly or indirectly.

There were no transfers between fair value levels during the year ended December 31, 2021 (2020: $nil).

b) Financial instruments
For trade receivables, the Group applies the simplified approach permitted by IFRS 9 "Financial Instruments", which requires expected lifetime losses to be recognized from initial recognition of the receivables.

Financial liabilities are initially measured at fair value and subsequently measured at amortized cost.

The Group is not a financial institution. The Group does not apply hedge accounting and its customers are considered creditworthy and in general pay consistently within agreed payments terms. In 2021, few customers have shown delays in payment which are closely monitored.

A classification of the Group's financial instruments is included in the table below:

	As at December 31, 2021 US$'000	As at December 31, 2020 US$'000
Cash and cash equivalents held at amortized cost	**14,560**	25,695
Trade receivables and accrued income held at amortized cost	**18,050**	13,437
Financial assets at amortized cost	**6,607**	2,815
Financial liabilities at amortized cost	**(23,255)**	(14,820)
Borrowings and leases	**(10,904)**	(4,225)
Total	**5,058**	22,902

24. Financial risk management

For the purposes of capital management, capital includes issued capital and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Directors' capital management is to ensure that the Group maintains a strong credit rating and healthy capital ratios in order to support its business and maximize shareholder value.

To maintain or adjust the capital structure, the Directors may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies or processes during the year.

The Directors manage the Group's capital structure and adjust it in light of changes in economic conditions and the requirements of the financial covenants. The Group includes in its net debt, interest-bearing loans and borrowings, trade and other payables, less cash and short-term deposits.

The Group's principal financial liabilities comprise borrowings and trade and other payables, which it uses primarily to finance and financially guarantee its operations.

The Group's principal financial assets include cash and cash equivalents and trade and other receivables derived from its operations.

a. Market risk
Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the returns.

b. Interest rate risk
Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. As the Group's borrowings are either on fixed interest terms or interest-free, the Group is not subject to interest rate risk.

c. Credit risk
Credit risk is the risk that a customer or counterparty to a financial instrument will not meet its obligations under a contract and arises primarily from the Group's cash in banks and trade receivables.

24. Financial risk management continued

d. Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate due to changes in foreign exchange rates. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to its financing activities (when financial liabilities and cash are denominated other than in a company's functional currency).

Most of the Group's transactions are carried out in US dollars ($). Foreign currency risk is monitored closely on an ongoing basis to ensure that the net exposure is at an acceptable level.

The Group maintains a natural hedge whenever possible, by matching the cash inflows (revenue stream) and cash outflows used for purposes such as capital and operational expenditure in the respective currencies. The Group's net exposure to foreign exchange risk was as follows:

	Functional currency					
As at December 31, 2021	**AUD US$'000**	**EUR US$'000**	**GBP US$'000**	**US$ US$'000**	**Others US$'000**	**Total US$'000**
Financial assets denominated in $	**3,489**	**3,443**	**399**	**22,713**	**649**	**30,693**
Financial liabilities denominated in $	**(24)**	**(889)**	**(25,268)**	**(4,341)**	**(103)**	**(30,625)**
Net foreign currency exposure	**3,465**	**2,554**	**(24,869)**	**18,372**	**546**	**68**

	Functional currency					
As at December 31, 2020	CNY US$'000	EUR US$'000	GBP US$'000	US$ US$'000	Others US$'000	Total US$'000
Financial assets denominated in $	248	2,145	717	17,190	5	20,305
Financial liabilities denominated in $	(102)	(268)	(475)	(129)	23	(951)
Net foreign currency exposure	**146**	**1,877**	**242**	**17,061**	**28**	**19,354**

Foreign currency sensitivity analysis:

The following tables demonstrate the sensitivity to a reasonably possible change in foreign currency exchange rates, with all other variables held constant.

The impact on the Group's profit before tax is due to changes in the fair value of monetary assets and liabilities. The Group's exposure to foreign currency changes for all other currencies is not material.

A 10% movement in each of the Australian dollar (AUD), Chinese yuan (CNY), euro (EUR), British pound (GBP) and US dollar ($) would increase/(decrease) net assets by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant.

As at December 31, 2021	**AUD US$'000**	**EUR US$'000**	**GBP US$'000**	**US$ US$'000**	**Others US$'000**
Effect on net assets:					
Strengthened by 10%	**347**	**255**	**(2,487)**	**1,837**	**54**
Weakened by 10%	**(347)**	**(255)**	**2,487**	**(1,837)**	**(54)**

As at December 31, 2020	CNY US$'000	EUR US$'000	GBP US$'000	US$ US$'000	Others US$'000
Effect on net assets:					
Strengthened by 10%	15	188	24	1,706	3
Weakened by 10%	(15)	(188)	(24)	(1,706)	(3)

e. Cash and cash equivalents

The Company considers the credit risk in relation to its cash holdings is low because the counterparties are banks with high credit ratings.

f. Trade receivables

Trade receivables are due from customers and collectability is dependent on the financial condition of each individual company as well as the general economic conditions of the industry. The Directors review the financial condition of customers prior to extending credit and generally does not require collateral in support of the Group's trade receivables. The majority of trade receivables are current or overdue for less than 30 days and the Directors believe these receivables are collectible. Amounts overdue longer than 120 days relate to a limited number of customers with long trading history. Collection of these receivables is expected in course of the year 2022. As at December 31, 2021, the Group had two customers that individually accounted for more than 10% of total receivables, totaling 36.4% of total trade receivables (2020: two customers that individually accounted for more than 10% of total receivables, totaling 38%).

g. Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they are due. The Directors manage this risk by:

- maintaining adequate cash reserves through the use of the Group's cash from operations and bank borrowings; and
- continuously monitoring projected and actual cash flows to ensure the Group maintains an appropriate amount of liquidity.

Year ended December 31, 2021	**Less than 1 year US$'000**	**2 to 5 years US$'000**	**> 5 years US$'000**	**Total US$'000**
Trade and other payables	**9,359**	**–**	**–**	**9,359**
Borrowings	**1,004**	**457**	**213**	**1,674**
Leases (gross cash flows)	**1,115**	**3,689**	**5,525**	**10,329**
Other liabilities	**10,658**	**–**	**88**	**10,746**
Retirement obligations	**–**	**–**	**2,281**	**2,281**
As at December 31, 2021	**22,136**	**4,146**	**8,107**	**34,389**

Year ended December 31, 2020	Less than 1 year US$'000	2 to 5 years US$'000	> 5 years US$'000	Total US$'000
Trade and other payables	5,815	–	–	5,815
Borrowings	1,573	–	–	1,573
Leases (gross cash flows)	385	1,346	1,162	2,893
Other liabilities	4,283	5,675	–	9,958
Retirement obligations	–	–	3,276	3,276
As at December 31, 2020	**12,056**	**7,021**	**4,438**	**23,515**

25. Notes to the statements of cash flows

Net debt reconciliation:

Year ended December 31, 2021	**Opening balances US$'000**	**New agreements US$'000**	**Assumed on acquisition of subsidiaries US$'000**	**Cash movements US$'000**	**Foreign exchange differences US$'000**	**Closing balances US$'000**
Cash and cash equivalents	**25,695**	**–**	**–**	**(10,525)**	**(610)**	**14,560**
Leases	**(2,652)**	**(5,829)**	**(1,636)**	**790**	**97**	**(9,230)**
Borrowings	**(1,573)**	**(472)**	**(579)**	**803**	**147**	**(1,674)**
Totals	**21,470**	**(6,301)**	**(2,215)**	**(8,932)**	**(366)**	**3,656**

Year ended December 31, 2020	Opening balances US$'000	New agreements US$'000	Assumed on acquisition of subsidiaries US$'000	Cash movements US$'000	Foreign exchange differences US$'000	Closing balances US$'000
Cash and cash equivalents	3,603	–	–	21,822	270	25,695
Leases	(2,784)	(222)	–	354	–	(2,652)
Borrowings	(2,478)	(61)	(1,512)	2,735	(257)	(1,573)
Totals	**(1,659)**	**(283)**	**(1,512)**	**24,911**	**13**	**21,470**

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For the year ended December 31, 2021

25. Notes to the statements of cash flows continued

Working capital reconciliation:

Year ended December 31, 2021	Opening balances US$'000	Assumed on acquisition of subsidiaries US$'000	Cash movements US$'000	Closing balances US$'000
Inventories	**13,540**	**2,258**	**(2,028)**	**13,770**
Trade receivables	**13,437**	**3,538**	**1,075**	**18,050**
Other receivables and prepayments	**2,609**	**–**	**3,666**	**6,275**
Trade and other receivables and prepayments	**16,046**	**3,538**	**4,741**	**24,325**
Trade and other payables	**5,815**	**2,971**	**573**	**9,359**
Accrued liabilities	**3,214**	**–**	**1,324**	**4,538**
Deferred revenue	**–**	**739**	**1,035**	**1,774**
Trade and other payables, accrued liabilities and deferred revenue	**9,029**	**3,710**	**2,932**	**15,671**

Year ended December 31, 2020	Opening balances US$'000	Assumed on acquisition of subsidiaries US$'000	Cash movements US$'000	Closing balances US$'000
Inventories	**3,202**	**1,152**	**9,186**	**13,540**
Trade receivables	9,175	388	3,874	13,437
Other receivables and prepayments	342	–	2,267	2,609
Trade and other receivables and prepayments	**9,517**	**388**	**6,141**	**16,046**
Trade and other payables	1,930	1,274	2,611	5,815
Accrued liabilities	3,113	–	101	3,214
Deferred revenue	50	–	(50)	–
Trade and other payables, accrued liabilities and deferred revenue	**5,093**	**1,274**	**2,662**	**9,029**

Reconciliation of cash on business combinations:

Cash assumed on acquisition of Chrisal NV	1,773
Cash assumed on acquisition of RAS AG	291
Cash assumed on acquisition of Life Material Technologies Ltd	73
Cash assumed on acquisitions of businesses	**2,137**
Consideration payment for acquisition of Chrisal NV	(6,054)
Consideration payment for acquisition of RAS AG	(1,482)
Consideration payment for acquisition of Life Materials Technologies Ltd	(2,550)
Consideration payment for acquisition of Chem-Tex assets	(908)
Consideration payment for acquisitions of businesses	**(10,994)**

26. Contingencies and provisions

The Group is, from time to time, involved in claims and legal proceedings. As per 31 December 2021, there is a potential claim with regards to a customer contract in the amount of up to US$175,000. Further, in April 2022 the Group was contacted by the United States Environmental Protection Agency ("EPA") in connection with potential alleged violations of the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA") pertaining to alleged mislabelling. However, at this point in time, the Group is not able to assess the likelihood of a favourable or unfavourable outcome or to quantify any possible financial impact.

The Group cannot reasonably predict the likelihood or outcome of these activities. However, the Group does not believe that adverse decisions in any pending or threatened proceedings related to any matter, or any amount which may be required to be paid by reasons thereof, will have a material effect on the financial condition or future results of operations.

As at December 31, 2021, no amounts have been accrued related to such matters (31 December, 2020: $nil).

27. Related party transactions

A company controlled by a director of HeiQ Materials AG supplied materials and services totaling US$32,000 in the year ended December 31, 2020 (2020: US$145,000). HeiQ Materials AG in turn supplied US$88,000 (2020: nil).

In 2022 goods that were in stock as of December 31, 2021 have been sold to a company controlled by a minority shareholder at cost value. However, the minority shareholder is not considered a related party to the Group. The value of the transaction amounts to US$900,000.

Details of the remuneration of the Directors are contained in the Remuneration Committee Report on pages 60 to 62.

28. Material subsequent events

On February 25, 2022 HeiQ PLC issued 347,552 new Ordinary Shares of £0.30 each in the Company. These shares have been allotted to the vendors of Life Material Technologies Limited to satisfy a closing working capital adjustment in connection with the Company's acquisition of LIFE in June 2021.

29. Ultimate controlling party

As at December 31, 2021, the Company did not have any single identifiable controlling party.

30. Correction of prior period errors

The prior year cashflow has been restated to split out foreign exchange from working capital adjustments. There is no impact on cash generated from operations. During the compilation of the financial statements for the year ended December 31, 2021, the Company discovered an understatement of inventory balances in prior years in respect of direct overhead expenses which had not been included in the inventory valuation. The cumulative effect of these errors as at December 31, 2020 was $212,000. The effect of the adjustments are shown in the following table:

Impact of adjustment on the Group's statement of financial position

	As at December 31, 2020 US$'000 (As previously stated)	Prior year adjustment US$'000	As at December 31, 2020 US$'000 (As restated)
Assets			
Inventories	13,328	212	13,540
Total Assets	**69,396**	**212**	**69,608**
Capital and reserves			
Retained deficit	8,711	(212)	8,499
Total Equity	**49,397**	**(212)**	**49,609**

The effect of the prior year adjustment as at December 31, 2019 was an understatement of inventories of US$78,000 and a corresponding overstatement of retained losses of the same amount.

The statement of comprehensive income for the year ended December 31, 2020 has been adjusted through a reduction in cost of sales of $134,000 and a corresponding increase in income before taxation. The adjustment had no impact on the taxation expense. As a result of the adjustment, the reported basic earnings per for the year ended December 31, 2020 was restated from 4.41 cents to 4.53 cents, and diluted earnings per share restated from 4.21 cents to 4.32 cents.

Due to the limited number of changes, the Company has not included an additional comparative statement of financial position for the year ended December 31, 2020.

Impact of adjustment on the Group's statement of comprehensive income

	Year ended December 31, 2020 US$'000 (As previously stated)	Prior year adjustment US$'000	Year ended December 31, 2020 US$'000 (As restated)
Net result for the year			
Cost of sales	(22,402)	134	(22,268)
Income before taxation	**7,026**	**134**	**7,160**
Income after taxation	**4,914**	**134**	**5,048**

Company Statement of Financial Position (registered company number: 09040064)

As at December 31, 2021

	Note	As at December 31, 2021 £'000	As at December 31, 2020 £'000
ASSETS			
Non-current assets			
Investments	5	**101,484**	119,609
Amounts due from subsidiaries	6	**18,000**	18,000
		119,484	137,609
Current assets			
Trade and other receivables	8	**377**	191
Cash and bank balances	7	**1,203**	1,554
		1,580	1,745
TOTAL ASSETS		**121,064**	139,354
LIABILITIES			
Current liabilities			
Trade and other payables	9	**(354)**	(483)
		(354)	(483)
NET ASSETS		**120,710**	138,871
EQUITY			
Share capital	10	**39,175**	37,767
Share premium account	10	**109,460**	102,536
Share-based payment reserve	11	**346**	38
Accumulated losses		**(28,271)**	(1,470)
TOTAL EQUITY		**120,710**	138,871

The Company has taken advantage of Section 408 of the Companies Act 2006 and has not included a Profit and Loss account in these separate financial statements. The loss attributable to members of the Company for the year ended December 31, 2021 is £26,801,000 (year ended December 31, 2020: loss of £1,065,000).

The notes on pages 119 to 125 form an integral part of these Financial Statements. The Financial Statements on pages 116 to 125 were authorized for issue by the Board of Directors on April 27, 2022 and were signed on its behalf by:

Xaver Hangartner
Director

Company Statement of Changes in Equity

For the year ended December 31, 2021

	Share capital £'000	Share premium account £'000	Share-based payment reserve £'000	Accumulated losses £'000	Total £'000
For the year ended December 31, 2020:					
Balance as at January 1, 2020	267	994	–	(405)	856
Loss for the year (as restated)	–	–	–	(1,065)	(1,065)
Issue of shares	37,500	102,502	–	–	140,002
Cost of issuing shares	–	(960)	–	–	(960)
Share-based payment charges	–	–	38	–	38
Transactions with owners	37,500	101,542	38	–	139,080
Balance as at December 31, 2020 (as restated)	**37,767**	**102,536**	**38**	**(1,470)**	**138,871**
For the year ended December 31, 2021:					
Loss for the year	**–**	**–**	**–**	**(26,801)**	**(26,801)**
Issue of shares	**1,408**	**6,924**	**–**	**–**	**8,332**
Share-based payment charges	**–**	**–**	**308**	**–**	**308**
Transactions with owners	**1,408**	**6,924**	**308**	**–**	**8,640**
Balance as at December 31, 2021	**39,175**	**109,460**	**346**	**(28,271)**	**120,710**

The notes on pages 119 to 125 are an integral part of these financial statements.

Company statement of cash flows

For the year ended December 31, 2021

Cash flows from operating activities	Year ended December 31, 2021 £'000	Year ended December 31, 2020 (Restated) £'000
Loss before taxation	**(26,801)**	(1,065)
Cash flow from operations reconciliation:		
Net finance income	**(375)**	(21)
Transaction costs settled in shares	**–**	431
Impairment provision	**26,821**	–
Working capital adjustments:		
(Increase) in trade and other receivables	**(186)**	(180)
Increase/(decrease) in trade and other payables	**(184)**	469
Cash used in operations	**(726)**	(366)
Net cash used in operating activities	**(726)**	(366)
Cash flows from investing activities		
Finance income	**375**	21
Amounts advanced to subsidiaries	**–**	(18,000)
Net cash used in investing activities	**375**	(17,979)
Cash flows from financing activities		
Proceeds from equity issuance	**–**	20,000
Costs of share issues	**–**	(960)
Net cash from financing activities	**–**	19,040
Net increase/(decrease) in cash and cash equivalents	**(351)**	695
Cash and cash equivalents – beginning of the year	**1,554**	859
Cash and cash equivalents – end of the year	**1,203**	1,554

Notes to the Company Financial Statements

For the year ended December 31, 2021

1. General information

The Company was incorporated on May 14, 2014 as Auctus Growth Limited, in England and Wales under the Companies Act 2006 with company number 09040064. The Company was re-registered as a public company on July 24, 2014. On December 4, 2020, following a reverse takeover of Swiss-based HeiQ Materials AG, the Company's name was changed to HeiQ PLC. The Company's registered office is 5th Floor, 15 Whitehall, London, SW1A 2DD.

After the reverse takeover, the Company's enlarged share capital was Re-admitted to the standard segment of the Official List and initiation of trading on the London Stock Exchange's Main Market commenced on December 7, 2020 under the ticker "HEIQ". The ISIN of the Ordinary Shares is GB00BN2CJ299 and the SEDOL Code is BN2CJ29.

The principal activity of the Company is that of a holding company for the Group, as well as performing all administrative, corporate finance, strategic and governance functions of the Group.

The Company's financial statements are prepared in pounds sterling, which is the presentational currency for the financial statements.

2. Summary of significant accounting policies

a. Basis of preparation

These Financial Statements have been prepared in accordance with UK adopted international accounting standards.

These financial statements are prepared under the historical cost convention. Historical cost is generally based on the fair value of the consideration given in exchange of assets. The principal accounting policies are set out below.

The Company produces consolidated accounts which include the results of the Company.

The financial statements have been prepared on a going concern basis which contemplates the continuity of normal business activities and the realization of assets and the settlement of liabilities in the ordinary course of business. The Directors have assessed the Company's ability to continue in operational existence for the foreseeable future in accordance with the Financial Reporting Council's Guidance on the going concern basis of accounting and reporting on solvency and liquidity risks issued in April 2016. The Company has prepared forecasts and projections which reflect the expected trading performance of the Company and the Group on the basis of best estimates of management using current knowledge and expectations of trading performance. As at December 31, 2021, the Company had £1,203,000 (2019: £1,554,000) in cash, which is considered sufficient for its present needs.

Based on the above, the Directors consider there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable, as well as to fund the Company's future operating expenses. The going concern basis preparation is therefore considered to be appropriate in preparing these financial statements.

b. Investments

Fixed asset investments are carried at cost less, where appropriate, any provision for impairment.

c. Loans to subsidiaries

Loans to subsidiaries are measured at the present value of the future cash payments discounted at a market rate of interest for a similar debt instrument unless such amounts are repayable on demand. The present value of loans that are repayable on demand is equal to the undiscounted cash amount payable reflecting the Company's right to demand immediate repayment.

d. Foreign currencies

Transactions in foreign currencies are recorded using the rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated using the contracted rate or the rate of exchange ruling at the balance sheet date and the gains or losses on translation are included in the profit and loss account.

2. Summary of significant accounting policies continued

e. Cash and cash equivalents
Cash and cash equivalents comprise cash in hand, bank balances, deposits with financial institutions and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

f. Trade and other receivables
Trade and other receivables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method, less provision for impairment.

g. Income taxes
The charge for taxation is based on the profit/loss for the year and takes into account taxation deferred because of timing differences between the treatment of certain items for taxation and accounting purposes.

Deferred tax is provided on timing differences which arise from the inclusion of income and expenses in tax assessments in periods different from those in which they are recognized in the financial statements. The following timing differences are not provided for: differences between accumulated depreciation and tax allowances for the cost of a fixed asset if and when all conditions for retaining the tax allowances have been met; and differences relating to investments in subsidiaries, to the extent that it is not probable that they will reverse in the foreseeable future and the reporting entity is able to control the reversal of the timing difference. Deferred tax is not recognized on permanent differences arising because certain types of income or expense are non-taxable or are disallowable for tax or because certain tax charges or allowances are greater or smaller than the corresponding income or expense.

h. Share-based payment arrangements
Equity-settled share-based payments to employees are measured at the fair value of the equity instruments at the grant date. Equity-settled share-based payments to non-employees are measured at the fair value of services received, or, if this cannot be measured, at the fair value of the equity instruments granted at the date that the Company obtains the goods or counterparty renders the service. Details regarding the determination of the fair value of equity-settled share-based transactions are set out in note 17 to the consolidated financial statements.

The fair value determined at the grant date of the equity-settled share-based payments is recognized on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. Where the conditions are non-vesting, the expense and equity reserve arising from share-based payment transactions is recognized in full immediately on grant.

Where the Company grants an equity-settled share-based payment award to employees of a subsidiary, then the Company classifies the transaction as equity-settled in its separate financial statements. The Company recognizes a capital contribution from the subsidiary as a credit to the share-based payment reserve and a corresponding increase in its investment in the subsidiary.

At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to other reserves.

i. Trade and other payables
Trade and other payables are initially recognized at fair value and thereafter stated at amortized cost using the effective interest method unless the effect of discounting would be immaterial, in which case they are stated at cost.

j. Share capital
Proceeds from issuance of Ordinary Shares are classified as equity. Incremental costs directly attributable to the issuance of new Ordinary Shares or options are shown in equity as a deduction from the proceeds.

k. Financial instruments
Financial instruments are recognized in the statements of financial position when the Company has become a party to the contractual provisions of the instruments.

Financial instruments are classified as liabilities or equity in accordance with the substance of the contractual arrangement. Interest, dividends, gains and losses relating to a financial instrument classified as a liability are reported as an expense or income. Distributions to holders of financial instruments classified as equity are charged directly to equity.

Financial instruments are offset when the Company has a legally enforceable right to offset and intends to settle either on a net basis or to realize the asset and settle the liability simultaneously.

A financial instrument is recognized initially at its fair value plus, in the case of a financial instrument not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial instrument.

Financial instruments recognized in the statements of financial position are disclosed in the individual policy statement associated with each item.

i. Financial liabilities

Financial liabilities are recognized when, and only when, the Company becomes a party to the contractual provisions of the financial instrument.

All financial liabilities are recognized initially at fair value plus directly attributable transaction costs and subsequently measured at amortized cost using the effective interest method other than those categorized as fair value through profit or loss.

Fair value through profit or loss category comprises financial liabilities that are either held for trading or are designated to eliminate or significantly reduce a measurement or recognition inconsistency that would otherwise arise. Derivatives are also classified as held for trading unless they are designated as hedges. There were no financial liabilities classified under this category.

A financial liability is derecognized when the obligation under the liability is discharged, cancelled or expires. When an existing financial liability is replaced by another from the same party on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the profit or loss.

ii. Equity instruments

Ordinary shares are classified as equity. Dividends on Ordinary Shares are recognized as liabilities when approved for appropriation.

iii. Other financial instruments

Other financial instruments not meeting the definition of Basic Financial Instruments are recognized initially at fair value. Subsequent to initial recognition other financial instruments are measured at fair value with changes recognized in profit or loss except investments in equity instruments that are not publicly traded and whose fair value cannot otherwise be measured reliably shall be measured at cost less impairment.

3. Correction of prior period errors

During the year ended December 31, 2020, the Company granted share option rights to a subsidiary’s employees directly. The subsidiary does not have an obligation to provide shares to its employees – the obligation sits with the parent company. As such, the share-based payment should have been treated as equity-settled in the financial statements of the subsidiary as well as the parent company. The subsidiary should have recorded a charge, and the equity element should have been treated as a capital contribution from the parent company. The parent company recorded this capital contribution as an expense in its own accounts rather than an increase in investment in its subsidiary. This error has been corrected as a prior period adjustment. There is no impact to the consolidated financial statements.

Notes to the Company Financial Statements continued

For the year ended December 31, 2021

3. Correction of prior period errors continued

The effect of the adjustment is shown in the following tables:

Impact of adjustment on the Company's statement of financial position

	As at December 31, 2020 US$'000 (As previously stated)	Prior year adjustment US$'000	As at December 31, 2020 US$'000 (As restated)
Fixed asset investments			
Investment in subsidiaries	137,571	38	137,609
	137,571	**38**	**137,609**
Total assets	**139,316**	**38**	**139,354**
Capital and reserves			
Share capital	37,767	–	37,767
Share premium account	102,536	–	102,536
Share-based payment reserve	38	–	38
Accumulated losses	(1,508)	38	(1,470)
	138,833	**38**	**138,871**

Impact of adjustment on the Company's income statement

	Year ended December 31, 2020 US$'000 (As previously stated)	Prior year adjustment US$'000	Year ended December 31, 2020 US$'000 (As restated)
Net result for the year			
Loss for the year	(1,103)	38	(1,065)
	(1,103)	**38**	**(1,065)**

There was no impact on the Company's cash flows as a result of this prior period adjustment.

4. Critical accounting judgments and key sources of estimation uncertainty

In the application of the Company's accounting policies, which are described in note 2, management is required to make judgments, estimates and assumptions about the carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

The key sources of judgment that have a significant effect on the amounts recognized in the financial statements are described below.

Impairment of fixed asset investments and amounts due from subsidiaries

As described in note 2 to the financial statements, fixed asset investments are stated at the lower of cost less provision for impairment. The present value of loans to subsidiaries that are repayable on demand is equal to the undiscounted cash amount payable reflecting the Company's right to demand immediate repayment.

At each reporting date, fixed asset investments and loans made to subsidiaries are reviewed to determine whether there is any indication that those assets have suffered an impairment loss. If there is an indication of possible impairment, the recoverable amount of any affected asset is estimated and compared with its carrying amount. If estimated recoverable amount is lower, the carrying amount is reduced to its estimated recoverable amount, and an impairment loss is recognized immediately in profit or loss.

The Directors have also carried out an impairment test on the value of the loans due from subsidiaries and have concluded that no impairment provision is necessary.

The Directors have also carried out an impairment test on the value of the Company's fixed asset investments and considered whether there are any indicators of impairment from external and internal sources of information, including the fact that the market capitalization of the Company has fallen below the net carrying value of such investments which would indicate that the carrying value may have been impaired and have concluded that an impairment provision of $26.8m is required to write down these amounts to their estimated recoverable amount.

5. Fixed asset investments

Investments in subsidiary undertakings	**As at December 31, 2021 £'000**	As at December 31, 2020 £'000
Balance brought forward	**119,609**	–
Additions	**8,696**	119,609
Impairment provision (note 4)	**(26,821)**	–
Balance at end of year	**101,484**	119,609

Details of the Company's principal subsidiaries as at December 31, 2021 are set out in Note 6 to the consolidated financial statements. The Company's investments in subsidiaries are carried at cost less impairment.

As noted above, the market capitalization of the Company has fallen below the combined carrying value of the Company's investments in and amounts due from subsidiary undertakings, and the Directors have concluded that this factor represents an indicator of impairment as at December 31, 2021.

As at December 31, 2021, the Company's market capitalization was £119,484,000 and the carrying value of its investments in subsidiaries was £128,305,000. The amounts due from subsidiaries as at December 31, 2021 was £18,000,000, which the Directors consider are not impaired.

The Company has therefore made provision for an impairment of £28,821,000 against the carrying value of the Company's investments in subsidiaries to reduce such value to £101,484,000.

6. Amounts due from subsidiaries

	As at December 31, 2021 £'000	As at December 31, 2020 £'000
Balance brought forward at beginning of year	**18,000**	–
Amounts advanced	**–**	18,000
Balance at end of year	**18,000**	18,000

The amounts owing from subsidiaries are unsecured, interest-free and are to be settled in cash. The present value of amounts that are repayable on demand is equal to the undiscounted cash amount payable, reflecting the Company's right to demand immediate repayment.

7. Cash and cash equivalents

	As at December 31, 2021 £'000	As at December 31, 2020 £'000
Bank balances	**1,203**	1,554
Cash and cash equivalents	**1,203**	1,554

Notes to the Company Financial Statements continued

For the year ended December 31, 2021

8. Trade and other receivables

	As at December 31, 2021 £'000	As at December 31, 2020 £'000
Prepayments	**108**	88
VAT receivable	**5**	67
Other receivables	**264**	36
	377	191

9. Trade and other payables

	As at December 31, 2021 £'000	As at December 31, 2020 £'000
Trade payables	**16**	226
Accruals	**129**	230
Taxes and social security	**8**	7
Deferred consideration	**55**	–
Other payables	**145**	20
	354	483

The Directors consider that the carrying amounts of amounts falling due within one year approximate to their fair values.

10. Share capital and share options

Share capital

Details of the Company's allotted, called-up and fully paid share capital are set out in note 17 to the Consolidated Financial Statements.

Movements in the Company's share capital were as follows:

	Number of shares No.	Share capital US$'000	Share premium US$'000	Totals US$'000
Balance as of January 1, 2020	2,668,999	350	1,305	1,655
Consolidation of shares	(1,779,346)	–	–	–
Placing of shares	11,789,142	4,641	12,684	17,325
Subscription for shares	6,068,000	2,389	6,529	8,918
Issue of shares to acquire HeiQ Materials AG	106,759,900	42,027	114,865	156,892
Shares issued in lieu of fees	385,209	152	414	566
Costs of share issues	–	–	(1,260)	(1,260)
Balance as at December 31, 2020	**125,891,904**	**49,559**	**134,537**	**184,096**
Issue of shares to acquire Chrisal NV	1,101,928	456	2,526	2,982
Issue of shares to acquire RAS AG	1,701,821	710	3,946	4,656
Issue of shares to acquire Life Materials	1,887,883	798	3,182	3,980
Balance as at December 31, 2021	**130,583,536**	**51,523**	**144,191**	**195,714**

The par value of all shares is £0.30. All shares in issue were allotted, called up and fully paid. The Ordinary Shares of the Company carry one vote per share and an equal right to any dividends declared.

Share options

Details of the Company's share option scheme and options issued during the year are set out in note 17 to the Consolidated Financial Statements.

11. Reserves

The share premium account represents the amount received on the issue of Ordinary Shares by the Company in excess of their nominal value and is non-distributable.

The share-based payment reserve arises from the requirement to value share options in existence at the year end at fair value (see note 17 to the Consolidated Financial Statements).

12. Share-based payments

Details of the Company's share options are contained in note 17 to the Consolidated Financial Statements.

13. Segment information

Operating segments are identified on the basis of internal reports about components of the Company that are regularly reviewed by the Board. Until its acquisition of HeiQ Materials AG on December 7, 2020, the Company was an investing company and did not trade. On the completion of the acquisition of HeiQ Materials AG and its subsidiaries, the Company became the holding company of the Group.

The Company has one segment, namely that of a parent company to its subsidiaries. Accordingly, no segmental analysis has been provided in these financial statements.

14. Employees

The average monthly number of employees including Directors was as follows:

	Year ended December 31, 2021 No.	Year ended December 31, 2020 No.
Directors	**5**	5
	5	5

15. Related party transactions

The only key management personnel of the Company are the Directors. Details of their remuneration are contained in the Remuneration Report on pages 63 to 64.

Details of amounts due between the Company and its subsidiaries are shown in note 6 above.

16. Subsequent events

Disclosures in relation to events subsequent to December 31, 2021 are shown in note 28 to the consolidated financial statements.

17. Ultimate controlling party

As at December 31, 2021, no one entity owns greater than 50% of the issued share capital. Therefore, the Company does not have an ultimate controlling party.

Company information

Directors
Carlo Centonze,
Chief Executive Officer

Xaver Hangartner,
Chief Financial Officer

Esther Dale-Kolb,
Non-Executive Chairwoman

Karen Brade,
Non-Executive Director

Benjamin Bergo,
Non-Executive Director

Company secretary
Ross Ainger

Company number
09040064

Registered address
5th Floor
15 Whitehall
London
SW1A 2DD

Independent auditors
Crowe U.K. LLP
55 Ludgate Hill
London
EC4M 7JW

Joint broker
Cenkos Securities plc
6 7 8 Tokenhouse Yard
London
EC2R 7AS

Registrars
Computershare Investor
Services PLC
The Pavilions
Bridgwater Road
Bristol
BS13 8AE

UNITED KINGDOM
(Ultimate parent)
HeiQ PLC
1st floor 47/48 Piccadilly
London W1J 0DT

SWITZERLAND
(Operational headquarters)
HeiQ Materials AG /
HeiQ GrapheneX AG
Ruetistrasse 12
8952 Schlieren (Zurich)

AUSTRALIA
HeiQ PTY
PO Box 940
Geelong VIC 3220
Australia

AUSTRIA
HeiQ AeoniQ GmbH
Industriestraße 35
3130 Herzogenburg

BELGIUM
HeiQ Chrisal NV
Priester Daensstraat 9
3920 Lommel

BRAZIL
Life Materials Latam Ltda
Avenida. Marques de São Vicente,
405 – Suite 1605
Barra Funda – São Paulo / SP
Brasil, Postal Code: 01139-001

GREATER CHINA
HeiQ (China) Material Tech Co., Ltd.
Room 2501
Xuhui Commercial Mansion
No. 168 Yude Road
Shanghai

HeiQ Company Ltd /
HX Company Ltd
No. 14 & 16, Ln. 50, Wufu 1st Rd.
Luzhu District
Taoyuan City 33850
Taiwan

Life Material Technologies Ltd. /
Life Natural Ltd.
Alexandra House, 6th floor
18-20 Chater Road
Central
Hong Kong

GERMANY
HeiQ RAS AG /
HeiQ Regulatory GmbH
Rudolf Vogt Straße 8-10
93053 Regensburg

JAPAN
Representative Office
NIU Bldg 2F
2-1-17 Nihonbashi
Chuo-ku
Tokyo, 103-0027

PORTUGAL
HeiQ Iberia Unipessoal Lda
Tecmaia
Rua Engº Frederico Ulrich, nº 2650
4470-605 Maia

SPAIN
HeiQ Medica SL
Plaza de la Estación s/n
29560 Pizarra (Málaga)

THAILAND
Life Material Technologies Ltd.,
Thailand / LMT Holding Ltd.
222 Lumpini Building 2
247 Sarasin Road
Bangkok 10330

USA
HeiQ ChemTex Inc.
180 Gee Rd NE
Calhoun GA 30701
2725 Armentrout Drive
Concord NC 28025

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