Polymers for Better Living™

Itaconix plc

Annual Report & Accounts 2022

POLYMERS FOR BETTER LIVING™

Itaconix is the world leader in polymers from itaconic acid. We deliver extraordinary customer value with novel polymers for everyday applications that achieve three essential objectives – safety, performance, and sustainability.

itaconix.com

Itaconix plc

Annual Report & Accounts 2022

HIGHLIGHTS

Operational Highlights

- Expanded commercial base with more uses in more brands, sold in more retail outlets.
- Revenues were higher in 2022 than 2021 by 115.7% driven by success in the cleaning segment in North America and Europe.
- Revenues from 2019 to 2022 grew at a compound annual growth rate of 63.1%.
- April 2022, fundraise with gross proceeds $0.4m and February 2023, fundraise with gross proceeds of $12.7m.

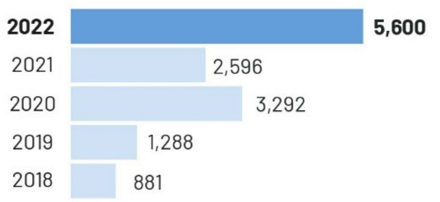
Financial Highlights

Itaconix plc (AIM:ITX)(OTC:ITXXF), a leading innovator in sustainable plant-based polymers used to decarbonise everyday consumer products, is pleased to announce it's final results for year ended 31 December 2022.

Revenues ($'000)

$5,600

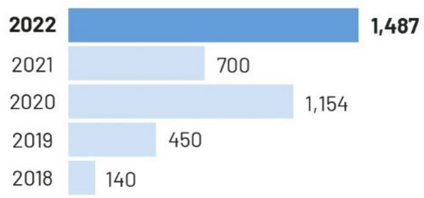
+115.7%



Gross profits ($'000)

$1,487

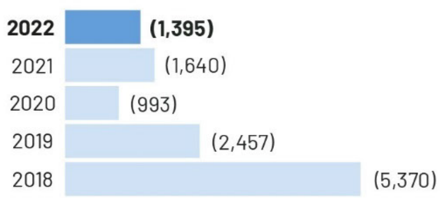
+112.4%



Adjusted EBITDA[1] ($'000)

$(1,395)

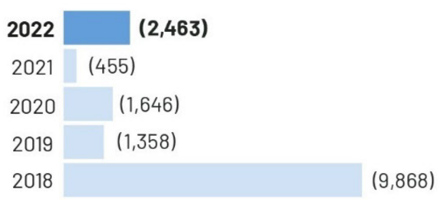
+14.9%



Net loss ($'000)

$(2,463)

-441.4%



Basic & Diluted loss per shares (¢)

$(0.5)

-400.0%

[1] Adjusted for interest, tax, depreciation, amortization, share based payment charge and exceptional items

Our purpose

Itaconix plc is using the ingenuity of nature to make the world a safer and better place.

We see innovations in biology and chemistry that we can harness to offer new answers for improving the health of our environment and rebalancing the planet's carbon cycle. We believe many of these answers do not have to depend on government actions or costly burdens to consumers.

We are dedicated to finding plant-based solutions that create new generations of cutting-edge consumer products that are safer and more sustainable without compromising on performance or cost.

Our Vision

We are using nature's ingenuity to lead a shift away from chemicals that have poor toxicity profiles and are made from fossil-based feedstocks.

Itaconic acid is a natural ingredient produced in the human and plant world that is at the core of our technology platform. We want to harness the broad functional, safety, and sustainability advantages of itaconic acid to displace acrylic acid or styrene across $20B of potential applications ranging from cleaning and beauty to paints and composites.

Our Business Plan

Our goal is to build a large, highly profitable specialty ingredients company.

We are using our technology platform to create a steady stream of new plant-based ingredients that meet specific customer needs or opportunities for better and more competitive consumer products. Increasing usage in everyday products, particularly in the 360 million North American and European households, will form a broad growing base of recurring revenues from consumer brands that rely on our ingredients for safety, performance, cost, and sustainability.

Our Progress

Before joining as a Non-Executive Director and Interim Chair in July 2022 and becoming Chair in January 2023, I followed Itaconix with great interest and excitement as a scientist, as an advocate for a new low-carbon economy, and as a shareholder. From all these vantage points, I am pleased to report a year of sustained progress for Itaconix, validating the technology platform and setting the stage for further growth.

We have sixteen families of patents that protect key competitive aspects of our technology platform, including an important new patent filing in 2022 for uses in advanced composites.

Our polymers are key functional ingredients for new generations of consumer products in cleaning, beauty, and hygiene. From detergents and air fresheners to pet care and hair sprays, our products are found in over 145 different consumer brands and in major retailers across both North America and Europe.

Where 2021 was marked by pandemic related challenges, 2022 delivered on the promise of our technology. New and recurring orders from our growing customer base increased our revenues to $5.6m in 2022 and form a strong foundation for continued growth toward profitability. Notably, with our successful fundraise in early 2023, we have the resources to create even more new products and to extend into new applications, while maintaining strong operations.

Corporate Governance

We made several changes to our corporate structure in 2022 and plan to add at least one additional non-executive director to further build our governance.

Dr Bryan Dobson stepped down, and Charlean Gmunder was appointed as Non-Executive Director of the Board, in April 2022. John Snow was not re-elected and Charlean Gmunder was not elected as Non-Executive Directors at the Company's Annual General Meeting in July 2022. Dr James Barber stepped down as Chair and Non-Executive Director of the Board, and I was appointed Interim Chair and Non-Executive Director in July 2022, becoming Chair in January 2023. The Company's CFO Laura Denner was appointed to the Board as an Executive Director in July 2022.

Dr Barber and Dr Dobson each served the Company as Chairs and each provided valuable guidance and direction to the development and commercial progress of the Company for over a decade. Mr Snow served as our Audit

Chair since 2018 and provided steady guidance through the financial and operating challenges of the Covid-19 pandemic. The Board greatly appreciates the years of service and many contributions that they all made to Itaconix. The Board also thanks Ms Gmunder for her time on the Board.

Ms Denner has assumed increasing finance, accounting, and operations responsibilities since joining us in 2013 and has served as the Company's Chief Financial Officer since 2018. She has played a key role in developing Itaconix together with John Shaw and Dr Yvon Durant, and has valuable financial experience, knowledge, and acumen for our next stage of growth.

Paul LeBlanc was appointed on 5 January 2023 as an independent Non-Executive Director and Chair of the Audit Committee. Paul has valuable operating experience for the Company's next stage of growth from his role as Chief Financial Officer and Treasurer of Bemis Associates, a global manufacturer of specialty films and adhesives for the apparel and industrial markets.

Summary

In summary, 2022 was a pivotal period for Itaconix's entry into a new stage of development and growth. We have validated our vision and business plan with a technology platform that generates valuable products, a broad base of recurring revenues, and attractive applications for far higher revenues. With funding in place and a strong pipeline of opportunities, we are on an exciting path to continue our growth and reaching profitability, becoming a large highly-profitable specialty ingredients business, and making the world a better and safer place.

Peter Nieuwenhuizen
Chair

2 June 2023

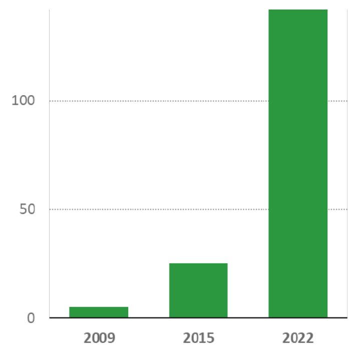
Solutions for performance, cost, and sustainability in consumer products

Introduction

FY2022 was the year when we validated both our technology and our pathway to growth. We have delivered revenues in line with previously upgraded market expectations at $5.6m, representing 115.7% growth when compared to revenues of $2.6m in the year to 31 December 2021. We also made improvements in gross margin percentage in the second half of the year. Alongside this we made substantial operational progress as outlined below.

We have been growing at 60%+ compound annual growth over the last three years, and we are confident that we will continue to grow. Growing revenues and controlling costs will allow us to cross into profitability. That is an important goal and we looking to achieve that. We have built the foundations for a large, high gross margin, specialty ingredients business.

Products Using Itaconix Ingredients



Our balance sheet now aligns with the high revenue growth from our current ingredients and the opportunities for us to develop new ingredients and higher revenues from our itaconate technology platform.

Major, purpose-driven, and private label brands are using our ingredients from itaconic acid to formulate new products or reformulate existing products to boost the sustainability credentials of their products. We estimate that use of Itaconix ingredients in brands has grown from fewer than 30 in 2015 to over 145 at the end of 2022, ranging from dishwashing detergents and carpet cleaners to curl sprays and dog shampoos. These brands form a broad base of recurring revenues that can generate further revenue growth as they secure placements in more retailers.

Technology Platform

The material at the core of our platform, itaconic acid, is a natural metabolite found in the human and plant world. Itaconic acid has been recognized for decades as a valuable plant-based material due to its versatile functionality and its safety profile. It is produced for commercial purposes by fermentation using plant-based feedstock and is widely available on the open market. We purchase and process it into key ingredients used in a wide range of consumer products. The long-term potential for our business is based on our proprietary technology platform for turning itaconic acid into functional polymers that have high performance, safety, and sustainability value in consumer products. Our capabilities are protected by 16 patent families.

Advantages of Itaconic Acid

Not only is itaconic acid a safe natural metabolite, but it is also highly valuable as a versatile building block for a range of chemistries. We have now harnessed the unique functionality of itaconic acid that scientists have searched for, and that is the reason why our ingredients continue to gain popularity and receive traction. Our technology platform allows us to pursue the replacement of acrylic acid and styrene, which combined are estimated to be worth more than $20bn in annual global demand.

Itaconic acid is independently considered to be a top value-added natural product. 20 years ago, the US Department of Energy already identified itaconic acid as one of the top 12 value added chemistries from biomass. That finding, with significant research behind it, is what we have pursued, and we have demonstrated its value in a range of consumer products.

The environmentally sound aspect of itaconic acid and the polymers we create is an additional and important benefit of those materials. The natural fermentation process through which itaconic acid is produced uses plant-based feedstocks that sequester carbon dioxide in the atmosphere, placing our business squarely within the low carbon economy.

Importantly, our polymer products compete primarily on performance, efficacy, and cost. Our technology shows that there is no need to sacrifice performance for the sake of sustainability, and no need to increase prices of products which deliver on those metrics either. We are the solution to creating consumer products with efficacy and which are sustainable without an increase in price. Our goal is to create products that deliver on performance, cost, and on sustainability, without charging consumers more money.

Market Potential

2022 was a breakthrough year for us, and with our ingredients now used in an estimated 145 brands around the world, we have generated 63% compound annual revenue growth since 2019. We have firmly established the value of the Itaconix technology platform and are positioned to lead a new generation of sustainable consumer products in the global low-carbon economy with competitive performance and costs for years to come.

The market potential for our technology platform is broadly defined by the $20B in current uses for acrylic acid and styrene in consumer care, hygiene, water solutions, agriculture, composites, and coatings. We currently have a portfolio of 12 ingredients for formulators to use in a new generation of consumer products, and we continuously develop new ingredients. Our products are protected by 16 patent families covering proprietary processes, compositions, and applications.

Product	Application Use
Cleaning	
Itaconix® DSP 2K™	Manage water hardness
Itaconix® TSI™ 322	Manage water hardness
Itaconix® TSI™ 122	Manage water hardness
Itaconix® ONZ 100	Manage water hardness and odour
Itaconix® ONZ 400	Manage water hardness and odour
Itaconix® ONZ 075	Manage water hardness and odour
Hygiene	
ZINADOR™ (Croda)	Odour neutralisation
VELAFRESH™ ZP20/30	Odour neutralisation
VELAFRESH™ SAP80	Superabsorbent (to be launched)
Beauty	
Amaze™ SP (Nouryon)	Hair styling
VELASOFT™ NE 100	Hair styling
VELASOFT™ BR 300	Repair damaged hair (to be launched)

Operating Review

Cleaning

We continued to make substantial progress in cleaning, most notably announcing a new distribution agreement with Brenntag North America to promote sustainable cleaning in household, industrial and institutional cleaning applications. Brenntag is a global market leader in chemical and ingredients distribution, and an important commercial partner for us. Under the terms of the distribution program, together with Brenntag North America we are promoting the performance, safety, and sustainability benefits of our cleaning polymers to an existing Brenntag client base of over 2,000 customers in the United States, Canada, and Mexico.

Currently one of most important polymers on our platform is Itaconix® TSI® 322. Its functionality reduces total ingredient costs in a more compact dosage, by replacing two or more water conditioning materials. This polymer also increases the plant-based content to improve the sustainability of the end-product. This combination is generating use across premium, value, and sustainable dishwasher detergent brands in North America. A key ingredient in these detergents, it manages water hardness and assures glasses, dishes, and utensils shine and do not have any spots or filming, by reducing mineral deposits. The multifunctional value of Itaconix® TSI® 322, is driving a new generation of non-phosphate dishwashing detergents and can now be found in an estimated 19 different products across a broad range of retailers in both North America and Europe, where usage is also starting to grow.

We estimate that Itaconix® TSI® 322 alone has a $260m addressable market from 30 billion dishwasher detergent tablets and sachets sold annually in Europe and North America.

Beauty

Itaconix produces polymers for hairstyling that are sold through Nouryon as Amaze® SP and by Itaconix as VELASOFT® NE 100. These ingredients are gaining use in hair care products as alternatives to fossil-based fixatives based on excellent curl retention, novel soft feel for "weightless" hairstyling, and high plant-based content.

We estimate that Itaconix hair fixatives have a $180m addressable market and another $20m as foam enhancers.

We have plans to launch additional new technologies and products to expand our position as a leader in plant-based beauty, particularly in hair care.

Hygiene

Itaconix produces polymers for odour neutralisation that are sold through Croda Inc. ("Croda") as ZINADOR® 22L and 35L and by Itaconix as VELAFRESH® ZP20 and ZP30. These ingredients have comparable odour control performance to incumbent ingredient, zinc ricinoleate, while offering the advantages of not leaving residues, ease of formulating into products, and plant-based content.

During the course of the year, we renewed our important supply agreement for sustainable odour control with Croda. Our relationship with Croda is an important collaboration for us, that has been running successfully since 2017. Under the terms of the extended supply agreement, Itaconix continues to produce and supply its proprietary ZINADOR® odour neutralizing ingredients for Croda to market and sell globally in home care applications. The agreement also added a new product to the collaboration and updated the terms and arrangements in line with ongoing market developments. We expect continued progress in brand usage and new applications through our joint efforts.

Increasing consumer interest in odour control and more sustainable hygiene products is generating new addressable markets for Itaconix's polymers. Our VELAFRESH® technologies offer potential benefits to meet these needs and become key ingredients in a new generation of plant-based hygiene products.

Innovation

We announced that we are extending our technology platform into potential uses in composite materials, and that we had filed a new patent application, which if granted would protect innovative intellectual property for expected applications in this new area. The extension of the Itaconix technology platform is part of our work to engage with potential customers to identify unmet needs that we can address with our plant-based solutions.

We estimate that a $600m per annum addressable market exists for potential Itaconix products based on this new technology; and although the usual steps remain to advance a new product to market, we are very excited that our plant-based solutions have the potential to address major customer needs which are not being fulfilled. The patent filing marked a significant milestone in our efforts to deliver safety and sustainability to new categories of consumer products, and product research based on this patent filing has now entered the next stage of commercial development.

Board Changes and New Chair

Peter Nieuwenhuizen has already outlined the changes we made during the year, but I would like to add my thanks and appreciation for the work and substantial contributions that outgoing Directors Dr Barber and Dr Dobson made. I wish them well for the future. I am also delighted to welcome Laura, Paul and of course Peter to the Board.

Peter is a strong addition to our team and his expertise dovetails well with our business. He was a Founding Partner of the European Circular Bioeconomy Fund (ECBF), a €300m venture capital fund dedicated to the circular bioeconomy and also serves as Chair of the Green Chemistry and Commerce Council. Prior to co-founding ECBF, Peter was CTO & Corporate Director RD&I & Sustainability for AkzoNobel Specialty Chemicals and VP Technology Deployment at Enerkem Inc in Canada. He earned his Ph.D. in Chemistry from Leiden University. He also sits on the Boards of a number of companies making important contributions to the low carbon economy. I look forward to working with him and the rest of the team.

We now have a strong leadership proposition with complimentary skills and experience to help navigate us through our next phase of growth.

Funding

In April 2022, we announced a small funding of $0.4m by way of direct subscription with existing institutional shareholder IP Group entities, and certain management. Far more significantly in February 2023, after the reported period, we announced that we had successfully raised gross proceeds of $12.7m through a placing, subscription, and open offer. The placing and subscription were oversubscribed from new and existing institutional investors and in the open offer, we received tremendous support from existing shareholders.

The Fundraising will be used for general working capital purposes to support continued revenue growth. But importantly we will also deploy some of the capital to accelerate the development of new products and applications. We will also spend capital to support continuous improvements in our processes.

With a stronger balance sheet we are better placed to improve some of our profit margins, as we restructure customer and vendor arrangements and build up inventory in Europe. The ability to place much larger amounts of product on the ground in Europe, ready to be delivered to locations on the continent and in the UK, will give a significant boost to our business, avoiding high spot logistics costs.

The funding also allows us to accelerate new products and new application development. We can also make improvements to our production line in our US manufacturing facility, enhancing production efficiencies, and driving costs down. We have substantial capacity at our existing facility and have no current plans to invest in a European production facility which would be capital intensive and consume valuable management time.

This fundraise is a game changer for our Company and I am extremely pleased to welcome new shareholders. They, like us, clearly recognise that we are now entering a new stage of development, as we execute on our plan to become a much larger sustainable ingredient company.

Outlook

We are focused on building a large, high gross margin, capital efficient, specialty ingredients business. Our technology platform, and our current products are all well-positioned to play significant roles in enabling a new generation of consumer products that offer performance, safety, and sustainability. We expect 2023 revenues to ramp up in line with market expectations. We are continuing to focus on improving gross margins and maintaining modest increases in operating expenses, as we commercialise more of our technology platform.

Our balance sheet now gives us the opportunity to target higher revenue growth from our current ingredients. There are many exciting opportunities for us to develop new ingredients and increase revenues from our substantial itaconate technology platform. We approach the future with more commercial progress, more resources, more potential, and more optimism than ever before.

John R. Shaw
Chief Executive Officer

2 June 2023

Principal Activities

Itaconix plc is a leading innovator in plant-based ingredients for improving the safety and performance of consumer and industrial products. Its proprietary polymer technologies generate a growing range of new specialty ingredients with unique functionalities that meet consumer demands for value and sustainability.

The Group’s principal activities are the development of plant-based polymers and the production and sale of these materials globally, both directly and through partners as ingredients in product formulations.

Most of the Group’s efforts are focused on home and personal care applications where consumer interest and desires for safer and more sustainable products are particularly high.

Proprietary Ingredients with Unique Functionality

As the leader in itaconate polymer technology, the Group has conducted many years of exploratory research and holds an extensive patent portfolio related to the production and use of polymers made from itaconic acid. The commercial potential for these materials as ingredients in consumer products stems from the unique functionalities available through the chemical structure of itaconic acid and from the production of itaconic acid through fermentation using plant-based sugar.

The Group’s technology platform has commercial momentum in cleaning, hygiene, and beauty as a result of the process of identifying a market need and then developing a product to meet that need. As these products gain broader use, Itaconix is working on new products to emerge from its technology platform.

Progress in 2022

The Group focused on improving supply chain cost and reliability, recovery of gross profit margins, managing working capital, and increased sales volumes. As the pandemic related supply constraint issues started to ease, the Group worked with suppliers to improve reliability by increasing US warehoused raw materials and communicating projected order volumes. These actions and increased availability of ocean freight have improved the global supply chain cost and reliability.

The work done to improve the Group’s supply chain has supported and stabilized the gross profit margin which is expected to improve in the coming periods. While addressing the cost component of the gross profit recovery, the Group has also issued several pricing increases throughout the year to customers to offset the overall increase in raw material costs.

During the year, the Group completed a small fundraise of $0.4m to support working capital needs in Europe. Inventory demand in EU were increasing faster than anticipated from the new and existing customer using Itaconix® TSI™ 322 in cleaning.

The Group advanced its development and commercial activities in its core cleaning, beauty, and hygiene applications, as detailed in the Chief Executive Officer’s Statement.

Key Performance Indicators (KPIs)

The Directors believe there are financial and non-financial key performance indicators for the Group. These KPIs are critical for management’s aim to monetise its technology platform through revenues generated by a growing number of commercial products. Non-financial KPI’s are detailed above in the Chief Executive Officer’s Statement.

Financial:

- Revenues
- Adjusted EBITDA, the earnings before interest, tax, depreciation, amortization, share based payments, and exceptional items
- Cash

Non-Financial:

- Increased volumes in North America cleaning
- Traction in Europe cleaning
- New hygiene applications
- New patent applications

Revenues for the year increased by 115.7% from 2021. Adjusted EBITDA improved by 14% from a loss of $1.6m in 2021 to a loss of $1.4m in 2022. Cash used in operations improved from $2.0m used in 2021 to $0.2m used in 2022. Cash use in operation consisted of approximately $1.4m used to fund operating expense which were offset by $1.2m reduction in working capital. This was supported by the Group's successful fundraise in April 2022. Below is a table showing the Group's key performance metrics:

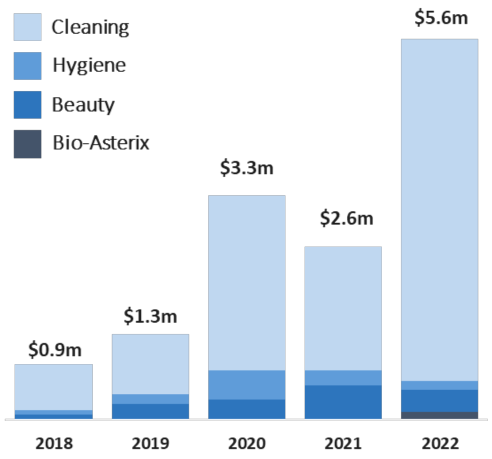
	2022	2021	2020	2019	2018
	$'000	$'000	$'000	$'000	$'000
Revenue	**5,600**	2,596	3,292	1,288	881
Gross profit	**1,487**	700	1,154	450	140
Gross profit margin	***26.6%***	*27.0%*	*35.1%*	*34.9%*	*15.9%*
Adjusted EBITDA[1]	**(1,395)**	(1,640)	(993)	(2,457)	(5,370)
Cash used from operating activities	**(219)**	(2,023)	(1,157)	(1,831)	(6,973)
Net cash at year-end	**597**	683	1,448	765	2,655

Financial Performance

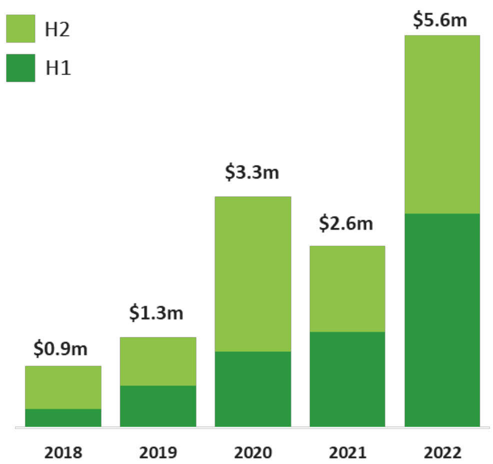
Revenue

Total revenues for the 12-month period ended 31 December 2022 were $5.6m, representing a 115.7% increase from 2021 revenues of $2.6m. Revenues since 2019 have a compounding annual growth rate of 63.1%. Revenues growth was driven by cleaning, while hygiene and beauty experienced lag. Cleaning increased by 173.8% from 2021, the increase was primarily due to strong increase in volumes in North America and faster than anticipated adoption of Itaconix® TSI™ 322 in Europe. An increase with more brands and more uses continued strong in the second half of 2022.

Revenues 2018 – 2022 (End Market)



Revenues 2018 – 2022 (H1 v H2[2])



Hygiene decreased by 36.3% from 2021, due to slower reorder volumes in the second half of 2022. However, there are more new brands in North America, Europe and Asia using Itaconix ingredients in odour neutralization products.

[1] Adjusted for interest, tax, depreciation, amortization, share based payment charge, and exceptional items.
[2] Unaudited revenue by reporting period.

Beauty decreased by 37.7% from 2021, which was due to a large stocking order fulfilled in November 2020 and slower order volumes in Europe.

Revenues in all geographical regions increased. North America represents 90.7% of the Group's revenue and increase of 110.7%. North America revenue driven significantly by the cleaning segment. Europe represents 9.3% of the Group's revenue and increased by 180.6%. European revenue improved largely due to the launch of several formulas using Itaconix® TSI™ 322 in Europe.

Gross Profit and Adjusted EBITDA[1]

Gross profit margin was 26.6% in 2022 compared to 27.0% in 2021. There was a slight decrease in gross profit margin due to the increased raw materials costs and logistics costs and increase in Formulation Solutions. Costs of ocean freight remained high through the end of 2022 and in the early 2023. The logistics costs have continued to lower as availability of shipping containers and boat space improve.

The increase in the Group's Formulation Solutions, which provides technical services and ingredient supplies for formulated products developed for customers based on Performance Ingredients, has impacted the gross profit margin. Formulated Solutions made up 17.7% of the Group's total revenues in 2022. Gross profit margins on Formulated Solutions are roughly 8%, which are lower than the Group's targeted gross profit margins of 35%. These are not products that are manufactured at Itaconix but are specified in formulation to support excellent performance in products developed for Itaconix Performance Ingredients.

Adjusted EBITDA is a non-IFRS measure but is widely recognised in financial markets and it is used within the Group as a key performance indicator. Adjusted EBITDA was a loss of $1.4m in 2022 (2021: loss $1.6m) which improved by 14.4%. The Group actively monitor administrative expenses and make prudent spending decisions to support the Group's strategic objective.

Below is a reconciliation of Loss for the Year to Adjusted EBITDA:

	2022	2021	2020	2019	2018
	$'000	$'000	$'000	$'000	$'000
Loss after tax	**(2,463)**	(455)	(1,646)	(1,358)	(9,868)
Taxation	**8**	7	7	1	(187)
Depreciation	**161**	167	200	223	296
Amortization	**202**	201	198	198	-
Exceptional revaluation of contingent consideration	**138**	(1,560)	339	(1,474)	3,323
Share based payments	**559**	-	-	-	-
Exceptional organizational restructuring	**-**	-	(91)	-	1,190
Finance income	**-**	-	**-**	(1)	(4)
Movement on investment in nicotine gum entity	**-**	-	**-**	(46)	(120)
Adjusted EBITDA	**(1,395)**	(1,640)	(993)	(2,457)	(5,370)

Administrative Expenses

Administrative expenses consist of sales, marketing, operations, research and development, and public company costs such as legal, finance and the Group Board. These expenses were $3.8m in 2022 up from $2.9m in 2021. The increase in administrative expense was largely due to increased staffing to support the Group's growth plans.

Costs and Available Cash

As at 31 December 2022, the Group held cash of $0.6m. Net Cash outflows from operating activities of $0.2m in 2022 were used to support the Group's growth plan while managing working capital needs compared to $2.0m in 2021. The Group successfully completed a $0.4m placing with a large shareholder, IP Group entities and executive management in April 2022.

Working capital

At year end, working capital had decreased and the most significant change was trade and other payables. Trade and other payables increased to $1.8m in 2022 from $1.0m in 2021. Inventories decreased to $1.1m in 2022 from $1.4m in 2021 and were adequate to support current customer demand. Working capital as a percentage of revenues decreased to 0.3% in 2022 from 50.5% in 2021.

Financial Position

At 31 December 2022, the Group had equity of ($0.8m) as compared to $0.6m in 2021, primarily as result of operating losses, a significant increase in the share-based payment reserve, and a share issuance.

Revaluation of Contingent Consideration

As a result of revaluing contingent consideration related to the acquisition of Itaconix Corporation in 2016, per note 17, there was an exceptional non-cash expense of $0.1m in 2022, which offsets the exceptional non-cash income of $1.6m (excluding foreign exchange) from 2021. In addition to the revaluation of the liability the Group settled the contingent consideration on 8 February 2023 at a value of $1.1m.

Financial Reporting

There were no new reporting standards adopted for the year end 31 December 2022 that have a material impact on the financial statements.

Going Concern

The financial statements have been prepared on a going concern basis. The Directors have reviewed the Parent Company's and the Group's going concern position taking account its current business activities, budgeted performance and the factors likely to affect its future development, set out in the Annual Report, and including the Group's objectives, policies and processes for managing its working capital, its financial risk management objectives and its exposure to credit and liquidity risks.

The Directors have also taken into consideration the current inflationary environment and macro-economic uncertainties together with the impact of the war in Ukraine on the Group's revenues and supply chain. While there has not been a significant negative impact through the report date on the Group revenues or supply chain as the pandemic moved into an endemic stage, the Directors have applied sensitivities to the timing, quantum, and growth of new customer projects in revenue models and have assessed alternate supply chains that have been developed by the Group to mitigate any issues in deliveries to our customers.

As further detailed in the Directors' Report on page 31 and note 2 to the Annual Report, the Directors have reviewed the Group's cash flow forecasts, which take account of gross proceeds of $12.7m capital raised in February 2023, covering a period of at least 12 months from the date of approval of the financial statements, which foresee that the Group will be able to meet its liabilities as they fall due. However, the success of the business is dependent on customers continuing to purchase our products to increase revenues and profits.

Shareholdings and Earnings per Share

Itaconix had 450,129,425 shares in issue as at 31 December 2022. The undiluted weighted average number of shares for the period to 31 December 2022 was 448,096,458. The difference in the two numbers is the result of an issuance of new shares in April 2022 (see note 20). The undiluted weighted average number of shares was used to calculate the loss per share presented in note 10.

Effective risk management is a priority for the Group to sustain the future success of the business. Therefore, the Directors have overall responsibility for the Group's risk management process but have delegated responsibility for its implementation, the system of controls which reduce risk and for reviewing their effectiveness to the management team. The risk of uncertainties that the Group face evolve over time, therefore the management team review and monitor the emerging risks and update mitigation effort. The results are reported to the Board.

Commercialisation Activities

There were some challenges due to the lingering pandemic that affect the Group's commercial activities. These included limited availability for ocean freight from North America to Europe, increased costs of raw materials and shipping delays from Asia to North America. These challenges were temporary and ultimately the success of the business relies upon Itaconix products reaching sufficient quantities for the Group to generate an overall profit.

Management of risk: The Group has sought to manage this commercialisation risk by partnering with market leaders for the worldwide promotion of our leading products, continued development of end-user formulas to provide customers with packaged solutions, and continuous review of the market needs for Itaconix products.

Dependence on Key Personnel

The Group depends on its ability to retain highly qualified managerial and scientific personnel. There are a limited number of candidates with the experience and skills to replace these key personnel. Attracting the best candidates can be highly competitive. While the Group has conventional employment arrangements with key personnel aimed at securing their services for minimum terms, their retention cannot be guaranteed.

Management of risk: The Group expanded its management team to support operations and has service contracts in place for John R. Shaw as Chief Executive Officer and Dr Yvon Durant as Chief Technology Officer. In addition, the Group seeks to retain key personnel in the US using an Equity Incentive Plan for share option grants, as disclosed in note 22.

Customer Retention

The ability to retain key customers is critical to maintaining revenue streams. The loss of key customers could impact business results adversely.

Management of risk: Acceptance of our products in our customers' end-product formulations is monitored and managed. Our customer service includes regular engagement on the performance of both our products and the end-products to ensure our ingredients are delivering the desired value to our customers and end-users.

Regulatory and Legislation

Regulatory bans on the use of phosphates as ingredients in detergents have transformed the consumer detergent markets in Europe and North America over the last ten years. Phosphates are known to enter waterways through detergent effluent and act as a nutrient for algae growth that subsequently cuts oxygen levels in water and harms aquatic life. We believe that phosphates are likely to be phased out in other jurisdictions around the world over time. Itaconix polymers are effective replacements for phosphates in detergents and are used in numerous detergent products in North America and Europe for this purpose.

Management of risk: The Group closely monitors regulatory developments in the use of ingredients in consumer and industrial products to assure compliance and find new revenue potential for Itaconix polymers. Further, the Group regularly assesses the relative performance and cost efficacy of Itaconix polymers to current and emerging phosphate replacements to identify revenue risks and opportunities.

Competition and Technology

The production and use of Itaconix polymers are subject to technological change over time. There can be no assurance that developments by others will not render the Group's product offerings and research activities obsolete or otherwise uncompetitive.

Management of risk: The Group employs experienced and highly-trained polymer chemists to develop and protect the Group's intellectual property. These efforts include continuous work on the performance and cost advantages of Itaconix polymers. In addition, the staff monitors technologies and patents through publications, scientific conferences, and collaborations with other organisations to identify new risks and opportunities.

Covid-19 Risk

The Group faces continued volatility, now decreasing, due to Covid-19 related disruptions in the demand for its products, the supply of raw materials, and the supply of other ingredients going into customer products. Our operations continued to operate while implementing recommended CDC guidance to protect our employees and provide a safe work environment. Supply chain issues continued into early 2023 due to extended shipping times and the availability of other ingredients going into customer products.

Management of risk: Management closely monitors Covid-19 regulatory developments as the pandemic transitions to an endemic. Management and staff actively communicate with all major suppliers and customers about upcoming demand and reliability of the supply chain. We also hold significant stock of long lead time raw materials from Asia.

Liquidity Risk

Itaconix seeks to manage financial risk by ensuring adequate liquidity is available to meet foreseeable needs and to invest cash assets safely and profitably. In April 2022, the Group completed a $0.4m fundraise to support general working capital in Europe. In addition, short-term flexibility is achieved by holding significant cash balances in Itaconix's functional currencies, notably UK Sterling and US Dollars.

Management of risk: The Group monitors bank balances held in established financial institutions and maintains adequate cash balances in its functional currencies.

Credit Risk

The principal credit risk for Itaconix arises from its trade receivables. To manage credit risk, new customers are subject to credit review and all customer accounts are regularly reviewed for debt aging and collection history. As at 31 December 2022, there were no significant credit risk balances.

Management of risk: The Group's control environment requires new customers to establish credit terms through providing credit references and a credit review. Trade receivables are actively monitored for collection history.

Inflation and Foreign Currency Risk

Global economies have experienced significant inflation during 2022. The cost of raw materials increased as costs for shipping, energy and ingredients increased. These increases were partially recovered in selling price increases to customers.

Selling price to international customers in foreign currencies has increased in 2022. This is offset by the ability to increase pricing to these customers and the Group has the ability to receive various foreign currencies in Bank accounts and convert them as market conditions are favourable.

Management of risk: The Group active monitors raw material costs and works with vendors to manage these costs. Costs increases are periodically passed onto customers through pricing increases.

Foreign Exchange Risk

Itaconix Plc is a publicly traded holding company on the London Stock Exchange. The Group's primary operations are in the US. These US based operations transact trades with customers in North America and internationally. Revenue and costs are exposed to variations in exchange rates and therefore reported losses. In 2019, the Group elected to convert the reporting currency from UK Sterling to US Dollars. The US Dollar transactions represent a significant portion of the functional currency transactions and therefore reduces the Group's overall exposure to translation exchange risk.

Management of risk: The Group manages foreign exchange risk by maintaining bank balances in major functional currencies to control the impact on transaction costs for operational expenses. The Group will continue to monitor appropriateness of reporting in US Dollars.

Government Risk

The Group has potential exposure to government activities related to the war in Ukraine and US-China trade relations.

Regarding the war in Ukraine, we reviewed all activity with the Russian Federation and Republic of Belarus. We have no direct customers in these regions nor in Ukraine and do not expect the war to have a material direct impact on our business other than the overall supply chain and economic effects experienced by manufacturers.

Limited availability and extended delivery times have combined to trigger major increases to certain raw material costs and may continue to cause volatility. These disruptions have created a steady need to monitor raw material sourcing, assess alternative suppliers, and adjust the pricing of the Group’s products.

Management of risk: The Group continues to monitor international impact of the war in Ukraine and legislation affecting the US imports of Chinese goods on the overall business.

Polymers for Better Living™

Our polymers are advanced sustainable materials that can make the world a better and safer place to live as essential ingredients in the next generation of consumer products.

The composition of our polymers, our patented process to produce them, their performance as ingredients in consumer product formulas, and how these formulas are packaged and delivered to consumers contribute to the fight against climate change with plant-based carbon, sequestering carbon, energy efficiency, and lighter consumer products.

Itaconix Ingredient Benefits as Advanced Sustainable Materials

Product	Plant-Based Carbon	Decarbonisation	Energy Efficiency	Lighter Products
Cleaning				
Itaconix® DSP 2K™	100%	√	√	√
Itaconix® TSI™ 322	>75%	√	√	√
Itaconix® TSI™ 122	>80%	√	√	√
Itaconix® ONZ 100	100%	√	√	
Itaconix® ONZ 400	>80%	√	√	
Itaconix® ONZ 075	>99%	√	√	
Hygiene				
ZINADOR™ (Croda)	80-100%	√	√	
VELAFRESH™ ZP20/30	80-100%	√	√	
VELAFRESH™ SAP80	>98%	√	√	
Beauty				
Amaze™ SP (Nouryon)	100%	√	√	
VELASOFT™ NE 100	100%	√	√	
VELASOFT™ BR 300	100%	√	√	

Plant-based carbon

The renewable carbon in the itaconic acid we use to make Itaconix products is captured as carbon dioxide by plants. Corn plants convert carbon dioxide into carbon in sugars that are used to produce itaconic acid via fermentation. We bring this itaconic acid into our patented process at our US operations to produce polymers that have 75-100% plant-based carbon.

Decarbonisation

The increase of carbon dioxide as a greenhouse gas in our atmosphere is a major cause of climate change. Carbon dioxide is sequestered as plant-based carbon in Itaconix products for a period of time until, depending on the circumstances, they degrade. During this period, the amount of carbon held contributes to a reduction of carbon dioxide in the atmosphere. The amount of net amount of carbon dioxide that is sequestered depends on the growth efficiency of the plant used as the feedstock for fermentation, the agricultural practices used to grow the plant, and the resources used to produce and transport itaconic acid to Itaconix's production facility. Itaconix is committed to work with its suppliers and partners to continuously improve the net sequestration in its products, and to develop transparent supply chains.

Energy efficiency

Improving energy consumption is a major sustainability goal for Itaconix and within the chemical industry.

Itaconix's efforts start with its patented polymer production process, which is efficient in its use of energy and capital equipment. Less energy use translates into less direct and indirect GHG emissions.

Itaconix is working to extend its energy efficiency efforts across all of its operations and practices with the development of reporting under the Streamlined Energy & Carbon Reporting (SECR) framework. We began in 2020 with the direct and indirect emissions from the purchase of electricity and natural gas. The table below shows the energy consumption and estimated GHG emissions at our US operations for the 12-month period ending 31 December 2020 from these activities.

	Energy consumption (kWh)		GHG emissions (tCO_2e)	
	2022	2021	2022	2021
Direct and indirect emissions	453,082	394,475	236.18	212.32
Intensity ratio: tCO_2e per $m Net Revenue			42.18	81.66

We have selected an intensity metric based on tonnes of carbon dioxide emissions (tCO_2e) per $m Net Revenue. We will use this ratio to monitor and extend our energy efficiency efforts further into our operations and practices. Although our estimated direct and indirect GHG emissions increased in 2022, the intensity ratio decreased due to higher overall production levels.

Water efficiency

Improving water consumption is a major sustainability goal for Itaconix and within the chemical industry. Itaconix was able to reduce its water consumption in production through re-engineering its facilities cooling operations in early 2022, saving approximately 70% the annual usage from the prior year.

	Water consumption (gal)	
	2022	2021
Direct consumption	102,870	336,540
Intensity ratio: gallons per $m Net Revenue	18.37	129.44

Lighter products

The multifunctional performance of Itaconix ingredients offers the potential for more compact consumer products, particularly in detergents. Compact products are lighter and can reduce greenhouse gas emissions by using less chemicals, less packaging, and more efficient transportation.

Revenues from Advanced Sustainable Materials

Itaconix plc is dedicated to reducing the planet's carbon footprint and addressing climate change with plant-based polymers that are essential ingredients in a new generation of safer, more sustainable consumer products.

Our financial results demonstrate that commercial and environmental progress can advance equally through the value and adoption of our ingredients. We are pleased to announce that 93% of our 2022 revenues (2021: 95%) were derived from advanced sustainable materials. This means that 93% of our revenues are related specifically to the design, development, and manufacture of materials that during their manufacture or through their use allow for considerable increases in the efficiency of resource usage.

Statement of Compliance with Section 172 of the Companies Act 2006

The Directors are required to include a separate statement in the Annual Report that explains how they have considered broader stakeholder needs when performing their duty under Section 172(1) of the Companies Act 2006. This duty requires that a director of a company must act in the way he or she considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to:

- the likely consequences of any decision 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 the environment;
- the desirability of the company to maintain a reputation for high standards of business conduct; and
- the need to act fairly between members of the company.

In connection with its statement, the Board describes in general terms how key stakeholders, as well as issues relevant to key decisions are identified, and also the processes for engaging with key stakeholders including employees and suppliers, and understanding those issues. It is the board's view that these requirements are predominantly addressed in the corporate governance disclosures we have made in the directors' report, which are themselves discussed more extensively on the company's website.

A more detailed description is limited to matters that are of strategic importance in order to remain meaningful and informative for shareholders. The Board believes that three decisions taken during the year fall into this category, and engaged with internal and external stakeholders on these decisions:

- 2022 Fundraise – The Directors assessed the placement by direct subscription with existing institutional shareholder IP Group entities and the executive management, to support the Group's accelerated working capital needs in Europe.
- Appointment of new Non-Executive and Executive Directors – The Directors continually assess the evolving needs of the Group. The Group interviewed several Directors to determine the best fit for the Group and appointed three new directors to support the strategic view of the growing business.

The Strategic Report encompassed on pages 9 through 18 was approved by the Board of Directors on 2 June 2023 and signed on behalf of the Board of Directors by:

Peter Nieuwenhuizen
Chair

John R. Shaw
Chief Executive Officer

Dr. Peter Jan Nieuwenhuizen (aged 53) – Independent Non-Executive Chair

Peter joined the Board and became Chair on 5 July 2022. Peter started his career at AkzoNobel, the coatings & chemicals company, where he held positions in R&D sales & marketing, supply chain, sustainability, and eventually as CTO & Corporate Director Sustainability for AkzoNobel Specialty Chemicals. Peter also worked as a strategy consultant for Arthur D. Little and as VP Technology Deployment for Enerkem Inc. He co-founded the European Circular Bioeconomy Fund (ECBF), a €300m venture fund dedicated to the circular bioeconomy.

He has a Ph.D. in Chemistry from Leiden University. He sits on the Boards of several organizations making important contributions to the low carbon economy, including as Chair of Change Chemistry.

John Roger Shaw (aged 63) – Chief Executive Officer

John joined the Board on 12 July 2018, when he assumed the role of Chief Executive Officer. As a founder, John has driven the direction and growth of Itaconix Corporation since 2008. He has over 25 years of experience in senior management roles in the pharmaceutical, biomedical, and specialty chemical sectors and brings significant marketing, strategy, and business management expertise along with a broad technical understanding to Itaconix's management team. John began his career holding a number of increasingly senior roles at SmithKline Beecham, Westaim, and Mitek Systems, Inc.

He has a BA in Economics from Pomona College and an MBA from Harvard Business School.

Laura Elizabeth Denner (aged 40) – Chief Financial Officer

Laura joined the Board on 20 July 2022. She has supported Itaconix growth since 2013 when she joined the organization as Controller. Laura began her career in public accounting with Feeley & Driscoll, PC focused on audits for manufacturing companies.

She has a BA in Accounting and International Studies from Bryant University and an MS in Accounting from Boston College. Laura is a Certified Public Accountant.

Paul Daniel LeBlanc (aged 61) – Independent Non-Executive Director

Paul joined the Board and became Audit Committee Chair on 5 January 2023. He has 25 years' experience in growing international manufacturing businesses. He is currently a CFO and Treasurer at Bemis Associates, Inc., an international adhesives manufacturing company.

He has a BA in Accounting from Thomas College and an MBA from University of Massachusetts Dartmouth.

The Board is committed to ensuring that the Group has the people, strategy, and structure to deliver value to customers and shareholders in the near and long term. We recognise that effective corporate governance is essential to meeting this commitment and fundamental to the success of the Group.

Solid corporate governance starts with the calibre and talents of the Directors. Biographies of the Directors are presented on page 19 and 20 in this Annual Report and reveal a range of relevant experience that brings a high level of independent judgement to Itaconix's business.

Under AIM Rule 26, AIM-quoted companies are required to adopt and give details of the corporate governance code which they have adopted and to show how they are following it. Of the recognised codes generally adhered to by AIM companies, the Quoted Companies Alliance's (QCA) Corporate Governance Code for small and mid-size quoted companies (the "QCA Code") was drafted with smaller businesses using a pragmatic and principles-based approach. The Board deemed the QCA Code as the most suitable for the Group and adopted it with effect from 29 September 2018.

As Chair, I am responsible for leading the overall effectiveness of the Board, for ensuring that the Board maintains effective corporate governance processes, and for promoting open communication and debate within the Board and across the Group to foster a positive governance culture. I am pleased with the continued application of the QCA Code and the Company's approach to complying with the QCA Code which is set out below.

Compliance with the Quoted Companies Alliance Corporate Governance Code

The QCA Code identifies ten principles that focus on the pursuit of medium- to long-term value for shareholders without stifling entrepreneurial spirit. Itaconix's adoption of the QCA principles is summarised below. Further details are available on our website.

1. **Establish a strategy and business model which promote long-term value for shareholders**

   Over the last ten years, Itaconix developed a polymer technology platform for producing specialty ingredients from renewable resources. The Group uses its novel chemistries to create new ingredients with unique functionality that create value and meet customer needs in homecare, personal care, and industrial products. We utilise direct sales efforts to acquire initial customers and confirm the value for a new product and may elect to scale globally with appropriate marketing partners. The long-term revenue and profit potential of each new product relative to its near-term development cost can generate many years of attractive returns and shareholder value. Our near-term strategy is to balance aggressive sustained product innovation from our polymer technology platform with a focus on profitable product lines and long-term financial stability. Additional information on our strategy and business model is presented in the Strategic Report on pages 9 to 18.

2. **Seek to understand and meet shareholder needs and expectations**

   The Board is committed to communicating and having constructive dialogues with current and potential shareholders on a regular basis. Shareholders are encouraged to attend the Company's Annual General Meeting and any other General Meetings that may be held during the year. Information on significant Group milestones and developments is readily available in news releases, investor presentations, interim reports, and annual reports issued directly, broadcast widely, and posted to the Group's website. Our CEO is the primary contact for current and potential investors and works closely with our Nominated Advisor (NOMAD) and others to interact with the broader investment community on a regular basis.

3. **Take into account wider stakeholder and social responsibilities and their implications for long-term success**

   The Board is committed to the Group developing and maintaining open communications and dialogues with employees, customers, suppliers, regulators, investors, and partners. In addition to the investor activities described above, key practical elements of this commitment include a flat organization with ready employee access to management and the Board, regular direct contact with customers, quality assessments and reviews with vendors, and leadership roles in industry and scientific associations.

4. **Embed effective risk management, considering both opportunities and threats, throughout the organization**

   The Board and management use a framework that effectively identifies, assesses, and manages the risks to the business that allows the Group to achieve its corporate objectives. The risk management process is embedded in monthly reporting and quarterly meetings. The risks that the Board considers to be most significant to the Group's business are set out on pages 13 to 15.

5. **Maintain the Board as a well-functioning, balanced team led by the Chair**

   The QCA Code requires that Boards have an appropriate balance between Executive and Non-Executive Directors and that each Board should have at least two Independent Directors. The Board is made up of two Executive Directors and two Independent Non-Executive Directors. The two Independent Non-Executive Directors are experienced and independent persons who have each succeeded in their own businesses and are not dependent upon income from the Group. They have a strong and detailed understanding of the business, and are prepared and able to intervene and challenge the Executive Director and management.

6. **Ensure that between them the Directors have the necessary up-to-date experience, skills and capabilities**

   All members of the Board bring relevant experience to the Board's responsibilities and duties. The Board believes its blend of experience, skills, and personal capabilities are well-suited for governing the success of the Group. Details of the background and experience of the Directors are set out in their biographies. These demonstrate that the Board collectively has extensive specialty chemical industry knowledge and relevant experience on the challenges of technology-based growth businesses and publicly-traded companies. The Board plans to add at least one additional non-executive director.

7. **Evaluate Board performance based on clear and relevant objectives, seeking continuous improvement**

   The Board performed a formal self-assessment in 2022 to evaluate various aspects of its structure, performance, and interaction with management. This self-assessment contributed to the Board's search for new directors. The Board will continually review its needs and assess opportunities for improvement as the Group's commercial activities develop.

8. **Promote a corporate culture that is based on ethical values and behaviours**

   Itaconix's core values are embedded in its quality system, which commits the Group to consistently deliver customer value, satisfaction and service through continual improvement and employee development. Key pillars of the culture are curiosity to use new approaches and technology to meet a need, accuracy of scientific analyses, the safety of our products and our processes, data-driven product claims that encourage customers to reformulate, reliable order fulfilment with quality product, compliance with all laws and regulations, and respect for the livelihoods of all stakeholders. These values and pillars are introduced and reinforced through daily routines and periodic activities that instil ethical and rewarding behaviour into each employee's work practices and experience.

9. **Maintain governance structures and processes that are fit for purpose and support good decision-making by the Board**

   Formal Board meetings are held at least quarterly to review strategy, management, and performance of the Group, with additional meetings between those dates convened as necessary. We have three Board committees, the Audit Committee, the Remuneration Committee, and the Nominations Committee. The terms of reference of these committees of the Board are available on our website.

10. **Communicate how Itaconix is governed and is performing by maintaining a dialog with shareholders and other relevant stakeholders**

   The Company's approach to investor and shareholder engagement is described under Principle 2 above. Annual reports, Annual General Meeting notices, regulatory announcements, trading updates and other governance related materials since the year 2016 are available on our website.

The Board of Directors

The Board of Directors is responsible for the proper management of the Group by formulating, reviewing and approving the Group's strategy, budgets, and corporate actions. In order to achieve its objectives, the Board has adopted the ten principles of the QCA Code. Through successfully implementing these principles, the Board aims to deliver long-term growth for shareholders and maintain a flexible, efficient and effective management framework within an entrepreneurial environment.

It is important that the Board itself contains the right mix of skills and experience in order to deliver the strategy of the Group. As such, the Board is comprised of:

- An Independent Non-Executive Chair, whose primary responsibility is the delivery of the Group's corporate governance model. The Chair has a clear separation from the day-to-day business of the Group which allows him to make independent decisions;
- Two Executive Directors; and
- One Independent Non-Executive Director.

The Board has not appointed a Senior Independent Director after taking into account the Group's size and development stage.

Each Director serves on the Board subject to re-election on a three-year rotation at the Annual General Meeting. The Board generally meets at least four times a year.

Corporate Governance

In compliance with UK best practice, the Board has established the following committees to help the Board discharge its responsibilities with formally delegated duties and responsibilities.

1. Audit Committee

The purpose of the Audit Committee is to monitor the integrity of the financial statements of the Group and to assist the Board in its oversight of risk and risk management processes.

Some of the Audit Committee's duties include:

- Reviewing the Group's accounting policies and adoption of new accounting standards;
- Reviewing reports from the external auditor;
- Considering whether the Group has followed appropriate accounting standards and made appropriate estimates and judgments, taking into account the views of the external auditor;
- Reporting its views to the Board of Directors if it is not satisfied with any aspect of the proposed financial reporting by the Group;
- Reviewing the adequacy and effectiveness of the Group’s internal financial controls and internal control and risk management systems;
- Reviewing the adequacy and effectiveness of the Group's anti-money laundering systems and controls for the prevention of bribery and receive reports on non-compliance; and
- Overseeing the appointment of and the relationship with the external auditor.

The Audit Committee currently has two members, all of whom are Independent Non-Executive Directors and at least one member who has recent and relevant financial experience. As at 2 June 2023, the Audit Committee is comprised of Paul LeBlanc as Chair, and Peter Nieuwenhuizen.

2. Remuneration Committee

The purpose of the Remuneration Committee is to develop and propose to the Board the framework and policies for the remuneration of the Group's Executive Directors and senior management.

The Committee normally meets at least twice a year and is responsible for determining and reviewing the policy for the remuneration of the Executive Directors and such other members of the executive management as it is designated to consider. Within the terms of the agreed policy, it determines the total individual remuneration of the Executive Directors. The Committee also approves the design of, and determines targets for, any performance-related pay schemes, reviews the design of any share incentive plans, determines the awards to the Executive Directors and sets the policy for, and scope of, pension arrangements for each Executive Director, as appropriate. Finally, the Committee approves the design and principles of the remuneration schemes for the employees of the business outside of the management team, which are implemented by the Executive Directors.

As at 2 June 2023, the Remuneration Committee is comprised of Peter Nieuwenhuizen as Chair, and Paul LeBlanc, each of whom is an Independent Non-Executive Director.

3. Nominations Committee

The Nominations Committee is normally required to meet at least once a year and is responsible for reviewing the structure, size and composition of the Board and recommending to the Board any changes required, for succession planning, and for identifying and nominating for approval of the Board candidates to fill vacancies as and when they arise, with a view to ensuring that the Board is composed of individuals with the necessary skills. The Committee is also responsible for succession planning for Directors and Executives, reviewing the leadership needs of the organisation, reviewing Board performance, making recommendations to the Board concerning suitable candidates for the role of senior independent Director (if applicable) and the membership of the Board's committees, and the election or re-election of Directors at the annual general meeting.

As at 2 June 2023, the Nominations Committee is comprised of Peter Nieuwenhuizen as Chair, and Paul LeBlanc, each of whom is an Independent Non-Executive Director.

Terms of Reference

All Board committees operate within defined terms of reference and sufficient resources are made available for them to undertake their duties. The terms of reference for each committee are available on the Company's website (in the Investor Relations section and under Corporate Governance).

Corporate Social Responsibility

The Board recognises the critical role of ethics, the growing concerns for social and environmental matters, and the need to take into account the interests of the Group's stakeholders, including its investors, employees, suppliers and business partners, when operating the business.

Employment

The Board recognises its legal responsibility to ensure the well-being, safety and welfare of its employees and maintain a safe and healthy working environment for them and for its visitors.

Itaconix recognizes the value of gender and ethnic diversity in its Board and Company. The Group is committed to diversity and inclusion of its governance and work force.

Relations with Shareholders

Itaconix attaches a high priority to effective communication with both institutional and private shareholders. The AGM is the principal forum for dialogue with private shareholders. A business presentation is made after the AGM and there is an opportunity for shareholders to put questions to the Directors. Itaconix aims to maintain regular contact with institutional shareholders through a programme of one to one presentations, group meetings, and briefings scheduled around the announcement of significant commercial developments in the business and the preliminary and interim financial results.

Share Dealing Code

The Company has adopted a share dealing code to ensure directors and certain employees do not abuse and do not place themselves under suspicion of abusing inside information of which they are in possession and to comply with its obligations under the Market Abuse Regulation ("MAR") which applies to the Company by virtue of its shares being traded on AIM. Furthermore, the Company's share dealing code is compliant with the AIM Rules for Companies, published by the London Stock Exchange (as amended from time to time).

Under the share dealing code, the Company must:

- Keep a list of each person who is in possession of inside information relating to the Group;
- Procure that all persons discharging managerial responsibilities and certain employees are given clearance by the Group before they are allowed to trade in Company securities; and
- Procure that all persons discharging managerial responsibilities and persons closely associated to them notify both the Company and the Financial Conduct Authority of all trades in Company securities that they make.

Internal Control

The Board has overall responsibility for ensuring that the Group maintains a system of internal control to provide its members with reasonable assurance regarding the reliability of financial information used within the business and for publication and that the Group's assets are safeguarded. There are inherent limitations in any system of internal control and accordingly even the most effective system can provide only reasonable, and not absolute, assurance with respect to the preparation of accurate financial information and the safeguarding of assets. The key features of the internal control system that operated throughout the year are described under the following headings:

- Control environment: particularly the definition of the organisation structure and the appropriate delegation of responsibility to operational management.
- Identification and evaluation of business risks and control objectives: particularly through a formal process of consideration and documentation of risks and controls which is periodically undertaken by the Board.
- Main control procedures: which include the setting of annual and longer term budgets and the monthly reporting of performance against them, agreed treasury management and physical security procedures, formal capital expenditure and investment appraisal approval procedures, and the definition of authorisation limits (both financial and otherwise).
- Monitoring: particularly through the regular review of performance against budgets and the progress of research activities undertaken by the Board. The Board reviews the operation and effectiveness of this framework on a regular basis. The Directors consider that there have been no weaknesses in internal controls that have resulted in any losses, contingencies or uncertainties requiring disclosures in the financial statements.

Annual General Meeting

The Annual General Meeting of the Group will take place on 28 June 2023. Full details are included in the Notice of Meeting that accompanies this Annual Report and is published on our website (www.itaconix.com).

Peter Nieuwenhuizen
Chair

2 June 2023

I am pleased to present the report on behalf of the Remuneration Committee.

The Committee is responsible for setting the remuneration policy of the Executive Directors and other senior staff, including terms of employment, salaries, any performance bonuses and share option awards.

Committee Composition

The members of the Remuneration Committee as at 2 June 2023 are Peter Nieuwenhuizen as Chair, and Paul LeBlanc. We are all Non-Executive Directors.

Committee Duties

The Company has established a formal and transparent procedure for developing policy on executive remuneration and for fixing the remuneration packages of individual Directors. No Director is involved in deciding his own remuneration.

Remuneration Policy

The key principles of the Remuneration Policy include:

- The need to attract, retain, and motivate executives who have capability to ensure the Group achieves its strategic objectives;
- The need to ensure that short term benefits and long term incentive plans are aligned with the interests of shareholders;
- The need to take into account the competitive landscape in the North American and European specialty chemicals industry and current best practices in setting appropriate levels of compensation; and
- The Committee to meet at least twice per year.

Director's Remuneration

The following table summarises the total gross remuneration for the qualifying services of the directors who served during the year to 31 December 2022.

Directors' Remuneration and Transactions

The Directors' emoluments in the year ended 31 December 2022 were:

	Basic salary	Benefits in kind	Retirement	Bonus	2022 Total	2021 Total
	$'000	$'000	$'000	$'000	$'000	$'000
Executive Director						
John R. Shaw	237	-	7	115	359	262
Laura E. Denner[1]	80	-	6	82	168	-
Non-Executive Directors						
Peter Nieuwenhuizen[1]	24	-	-	-	24	-
James Barber[2]	30	-	-	-	30	60
John Snow III[2]	23	-	-	-	23	46
Charlean Gmunder[2]	8	-	-	-	8	-
Bryan Dobson[3]	13	-	-	-	13	45
Total	415	-	13	197	625	413

[1]*Appointed - July 2022*
[2]*Resigned or not re-elected or not elected - July 2022*
[3]*Retired - April 2022*

Directors' Interests

The interests of the Directors in the share capital of the Company are disclosed below.

Directors' Interests	31 December 2022 Number of ordinary shares of 1p each	31 December 2021 Number of ordinary Shares of 1p each
John R. Shaw	44,961,686	44,961,686
Laura Denner	12,706,636	-
Peter Nieuwenhuizen	200,000	-
John Snow III	-	2,576,841
James Barber	-	2,557,727
Bryan Dobson	-	1,038,045

None of the Directors has a service contract with the Group requiring more than twelve months' notice of termination to be given. None of the Directors had, either during or at the end of the year, any material interest in any contract of significance with the Company or its subsidiaries.

Executive Directors' Service Contracts

The Executive Director signed service contracts on his appointment. These contracts are not of fixed duration. The Chief Executive Officer's contract is terminable by either party giving six months' written notice.

Non-Executive Directors

The Non-Executive Directors signed letters of appointment with the Group for the provision of Non-Executive Directors' services, which may be terminated by either party giving written notice. The remuneration of the Non-Executive Directors is determined by the Board as a whole.

The Committee met three times during the financial year to 31 December 2022.

Peter Nieuwenhuizen
Chair of the Remuneration Committee

2 June 2023

The Audit Committee is responsible for promoting the quality of internal controls and ensuring that the financial performance of Itaconix is reviewed and reported properly.

The Committee reviews reports on the interim and annual accounts, financial announcements, the Company's accounting and financial control systems, changes to accounting policies, the extent of non-audit services undertaken by the external auditor, and the appointment of the external auditor.

During the period the Audit Committee reviewed the draft interim reports and associated announcements. The Audit Committee considered the accounting policies and principles adopted in these accounts as well as significant accounting issues and areas of judgement and complexity.

Committee Composition

The terms of reference for the Audit Committee require the committee to consist of preferably three members but not less than two members and that a majority of the members shall be independent non-executives with at least one with recent and relevant financial experience.

The members of the Audit Committee as at 2 June 2023 are Paul LeBlanc as Chair, and Peter Nieuwenhuizen. We are all Independent Non-Executive Directors.

The Board is of the view that the Audit Committee has recent and relevant financial experience. John Shaw, CEO, Laura Denner, CFO, and relevant management may attend Committee meetings by invitation.

Role of the Committee

The main duties of the Committee are set out in its terms of reference, which are available on Itaconix's website. The main items of business considered by the Committee included:

- Reviewing the Group's accounting policies and reports produced by internal and external audit functions;
- Considering whether the Group has followed appropriate accounting standards and made appropriate estimates and judgements, taking into consideration the views of the external auditor;
- Reporting its views to the Board of Directors if it is not satisfied with any aspect of the proposed financial reporting by the Group;
- Reviewing the adequacy and effectiveness of the Group's internal financial controls and its internal control and risk management systems;
- Reviewing the adequacy and effectiveness of the Group's anti-money laundering systems and controls for the prevention of bribery and receive reports on non-compliance, and
- Overseeing the appointment of and the relationship with the external auditor.

Financial Reporting

The Committee reviews whether suitable accounting policies have been adopted and whether management has made appropriate judgements and estimates. The Committee's remit includes reviews of accounting papers prepared by management providing details on the main financial reporting judgements as well as assessments of the impact of potential new accounting standards.

The Committee has concluded that the Annual Report and financial statements are prepared appropriately and provide the necessary information for shareholders to assess Itaconix's strategy and performance.

Risk Management and Internal Controls

Itaconix's risk and control management framework is designed to manage rather than eliminate the risk of failure to meet Itaconix's objectives. The system of controls can provide reasonable but not absolute assurances against material misstatement or loss. Itaconix faces a number of risks, the significant ones of which are set out in the section on Principal Risks and Uncertainties on page 13 to 15.

Through the control systems outlined in the Corporate Governance Report on pages 21 to 25, Itaconix operates an ongoing process of identifying, evaluating, and managing significant risks faced by the business. This process includes the following:

- Defined organisation structure and appropriate delegation of authority;
- Formal authorisation procedure for investments;
- Clear responsibility for management to maintain good financial control and the production and review of detailed, accurate and timely financial information;
- Identification of operational risks and mitigation plans developed by senior management; and
- Regular reports to the Board from the Executive Directors.

Itaconix remains, in substance, in early stage development and is currently implementing appropriate internal controls and processes to reflect its size and business complexity. The Committee has been kept up-to-date of progress in implementing these processes, reviewed the Board's processes, and the Committee is satisfied that the risk management and internal control systems in place are currently operating effectively.

External Auditor

BDO was appointed auditor of Itaconix during 2019. The Committee considers that its relationship with the auditor is working well and is satisfied with their effectiveness.

The Committee is responsible for implementing a suitable policy for ensuring that non-audit work undertaken by the auditor is reviewed so that it will not impact their independence and objectivity. The breakdown of fees between audit and non-audit services is provided in note 6 to Itaconix's financial statements.

The non-audit fees primarily relate to a read through of the interim financial statements of the Group and, as necessary, the Committee held private meetings with the auditor to review key items within its scope of responsibility.

For and on behalf of the Audit Committee

Paul LeBlanc
Chair of the Audit Committee

2 June 2023

The Directors of Itaconix plc (registered number 08024489) submit their report as follows:

Principal Activities

The principal activities of the Group are the research and production of proprietary specialty polymers that meet significant customer needs, with a strategy of direct selling efforts to establish initial use of new polymers, with the option to also scale global demand through partnerships where desirable, with a focus on North America and Europe.

Most of the Group's activities are focused on homecare and personal care applications where consumer interest and desires for safer and more sustainable products are particularly high.

Website Publication

The Directors are responsible for ensuring the annual report and the financial statements are made available on a website. Financial statements are published on the Group's website in accordance with legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the Group's website is the responsibility of the Directors. The Directors' responsibility also extends to the ongoing integrity of the financial statements contained herein. Financial Instruments and Liquidity Risks Information about the use of financial instruments by the Company and its subsidiaries and the Group's financial risk management policies are given in note 18.

Directors and their Interests

The Directors of Itaconix plc at 31 December 2022 were:

Peter Nieuwenhuizen (Chair);
John R. Shaw (Chief Executive Officer); and
Laura Denner (Chief Financial Officer).

Paul Leblanc was appointed as a non-executive director and chair of the Audit Committee on 5 January 2023.

John R. Shaw was re-elected at the 2022 Annual General Meeting. In accordance with Article 90 of the Company's Articles of Association, Peter Nieuwenhuizen, Laura Denner, and Paul LeBlanc will stand for election at the 2023 Annual General Meeting. John Snow was not re-elected and Charlean Gmunder was not elected as Non-Executive Directors at the Company's Annual General Meeting in July 2022. Dr James Barber stepped down as Chair and Non-Executive Director of the Board in July 2022. Biographical details of all the Directors as at 1 May 2023 are given above on pages 19 to 20.

Company Secretary

Laura Denner was appointed Company Secretary on 1 September 2019.

Liability Insurance for Directors, Officers and Employees

Itaconix has purchased insurance to cover the Directors, officers and employees of Itaconix plc and its subsidiaries against defence costs and civil damages awarded following an action brought against them in their personal capacity whilst carrying out their professional duties for the Group.

Dividends

Itaconix is seeking primarily to achieve capital growth for its shareholders. Its intention is to retain future distributable profits, if any, and therefore the Company does not anticipate paying any dividends in the foreseeable future. The Directors therefore do not recommend payment of a dividend (2021: £nil).

Events after the Balance Sheet Date

In February 2023, the Company issued 206,082,048 new ordinary shares via placing, direct subscription, and open offer for $12.7m, to enable the Company to continue to execute its growth plans and for general working capital purposes.

In February 2023, the Company issued 18,094,582 new ordinary shares in final settlement of the contingent consideration agreement from 2016 acquisition of Itaconix Corporation.

Research and Development

Details of the Group's activities on research and development during the year are set out in the Strategic Report on pages 9 to 18 and Chief Executive Officer's Statement on pages 5 to 8.

Going Concern

Itaconix business activities, together with the factors likely to affect its future development, performance and position are set out in the Strategic Report and the financial position of Itaconix, its cash flows and liquidity position are described in the notes to the financial statements, in particular in the consolidated cash flow statement and in note 18 (financial instruments).

The financial statements have been prepared on a going concern basis. The Directors have reviewed the Parent Company's and the Group's going concern position taking account its current business activities, budgeted performance and the factors likely to affect its future development, set out in the Annual Report, and including the Group's objectives, policies and processes for managing its working capital, its financial risk management objectives and its exposure to credit and liquidity risks.

As described in note 2, the Directors have reviewed the Group's cash flow forecasts covering a period of at least 12 months from the date of approval of the financial statements, which foresee that the Group will be able to meet its liabilities as they fall due. However, the success of the business is dependent on customers continuing to purchase our products in order to increase revenue and profit growth.

The Directors have also taken into consideration the continued impact of the current economic environment, Covid-19 pandemic and the war in Ukraine on the Group's revenues and supply chain. The Directors have taken into account the gross proceeds of $12.7m raised in February 2023. The Directors have applied sensitivities to the timing, quantum, and growth of new customer projects in revenue models and have assessed alternate supply chains that have been developed by the Group to mitigate any issues to our customers.

The Directors believe that taken, as a whole, the factors described above enable the Parent Company and Group to be and continue as a going concern for the foreseeable future. The financial statements do not include the adjustments that would be required if the Parent Company and the Group were unable to continue as a going concern.

Substantial Shareholdings

In addition to the Directors' interests, as disclosed in the Director's Remuneration Report, the Company is aware of the following shareholders with a percentage holding amounting to 3% or more of the ordinary share capital based on the Company's shareholder register as of 31 December 2022:

Shareholder	Shares Held	% Holding
Hargreaves Lansdown Asset Management	80,855,298	18.0%
IP Group	55,913,194	12.4%
John R. Shaw	45,517,242	10.1%
Interactive Investor	35,044,908	7.8%
Halifax Share Dealing	22,813,431	5.1%
Octopus Investments	20,287,288	4.5%
Guy Broadbent	17,525,000	3.9%
AJ Bell Securities	16,495,010	3.6%

The percentage interest has been calculated on the total voting rights of 450,129,425, being the Company's issued share capital on 31 December 2022. No other person has reported an interest in the ordinary shares of the Company required to be notified to the Company.

Information Presented in Other Sections

Certain information required to be included in a directors' report by Schedule 7, including references to future developments, research and development, and financial instruments, can be found where applicable in the other sections of this Annual Report. All of the information presented in those sections is incorporated by reference into this Directors' Report and is deemed to form part of this report.

Greenhouse Gas Emissions

The 2018 Regulations introduced requirements under Part 15 of the Companies Act 2006 for an enhanced group of companies, which are defined as large by the Companies Act 2006, to disclose their annual energy use and greenhouse gas emissions, and related information. Under the 2018 Regulations, the Group is not currently defined as large and is considered a low energy user, with annual energy consumption less than 40 MWh. Based on Itaconix's dedication to reducing the planet's carbon footprint and addressing climate change, the Group has chosen to disclose its US subsidiary annual energy use and greenhouse gas emissions in the Sustainability Section on page 17.

Directors' Responsibilities

The Directors are responsible for preparing the annual report and the financial statements in accordance with applicable law and regulations. Company law requires the Directors to prepare financial statements for each financial year. Under the law the Directors have elected to prepare the Group and Parent Company financial statements in accordance with UK adopted International Accounting Standards ("IFRS") and applicable law. Under company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of the profit or loss of the Group for that period. The directors are also required to prepare financial statements in accordance with the rules of the London Stock Exchange for companies trading securities on the Alternative Investment Market. In preparing these financial statements, the Directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and accounting estimates that are reasonable and prudent;
- State whether they have been prepared in accordance with UK adopted International Accounting Standards ("IFRS"), subject to any material departures disclosed and explained in the financial statements; and
- Prepare the financial statements on a 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 and enable them to ensure that the financial statements comply with the requirements of the Companies Act 2006.

They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Website publication

The Directors are responsible for ensuring the annual report and the financial statements are made available on a website. Financial statements are published on the company's website in accordance with legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the company's website is the responsibility of the directors. The directors' responsibility also extends to the ongoing integrity of the financial statements contained therein.

Information Given to the Auditor

Each of the persons who are Directors of the Company at the date when this report was approved confirms that:

- So far as the Director is aware, there is no relevant audit information (as defined in the Companies Act 2006) of which the Company's auditor is unaware; and

- The Directors have taken all steps that they ought to have taken as Directors to make themselves aware of any relevant audit information (as defined in the Companies Act 2006) and to establish that the Company's auditor is aware of that information. This confirmation is given and should be interpreted in accordance with the provisions of s418 of the Companies Act 2006.

Auditor

BDO, LLP have expressed their willingness to continue in office as auditor. A resolution concerning their re-appointment will be proposed at the 2023 Annual General Meeting.

Approved by the Board of Directors and signed on behalf of the Board,

John R. Shaw
Chief Executive Officer

2 June 2023

Opinion on the financial statements

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2022 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK adopted international accounting standards;
- the Parent Company financial statements have been properly prepared in accordance with UK adopted international accounting standards and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of Itaconix Plc (the 'Parent Company') and its subsidiaries (the 'Group') for the year ended 31 December 2022 which comprise the consolidated income statement, the consolidated statement of comprehensive income, the consolidated and company balance sheets, the consolidated and company statements of changes in equity, the consolidated and company statements of cash flows and notes to the financial statements, including a summary of significant accounting policies.

The financial reporting framework that has been applied in their preparation is applicable law and UK adopted international accounting standards and, as regards the Parent Company financial statements, as applied in accordance with the provisions of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remain independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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 and the Parent Company's ability to continue to adopt the going concern basis of accounting included:

- Review of the internal forecasting process to confirm the projections are prepared by an appropriate level of staff that are aware of the detailed figures included in the forecast but also have an understanding of the Group's market, strategy and changes in the customer base;
- Reviewing Director's assessment of going concern through analysis of the Group's cash flow forecast and other projections through to 31 December 2024, including assessing and challenging the assumptions as to determine whether there is adequate support for the assumptions underlying the forecasts through comparison against post year-end results to date;
- Performing sensitivity analysis to consider cash flow requirements if the level of revenue and costs changes in various forward-looking scenarios. This includes, taking account of the continuing impact of inflation and the situation in Ukraine, reverse stress testing to ascertain what levels of cost increases or revenue decline cause a cash shortage at any point in Director's post balance sheet assessment period and considering the likelihood that those fact patterns could occur;
- Reviewing the terms of the group's existing working capital facilities, vouching the cash proceeds from

post year-end funds raised to supporting documentation and assessing the reasonableness of any plans the Directors have for future fund raising;

- Making inquiries of Directors as to their knowledge of events or conditions beyond the period of their assessment that impact the Group and Parent Company's ability to continue as a going concern;
- Reviewing post-balance sheet results, specifically the cash flow position against that budgeted; and
- Considering the adequacy of the disclosures in the financial statements against our knowledge of the Group, the Directors' going concern assessment and the requirements of the accounting standards.

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 and the Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

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

Overview

Coverage	*100% (2022: 100%) of Group profit before tax* *99% (2022: 99%) of Group revenue* *100% (2022: 100%) of Group total assets*
Key audit matters	2022 / 2021 1. Revenue Recognition — ✔ / ✔ 2. Valuation of Contingent Consideration* — x / ✔ 3. Going Concern** — x / ✔ *Valuation of Contingent Consideration is no longer considered to be a key audit matter because the contingent consideration assessment period was substantially completed at the 2022 year end. **Going Concern is no longer considered to be a key audit matter because of the Group's available working capital.
Materiality	*Group financial statements as a whole* $86,000 (2021: $100,000) based on 3-year average loss before tax, adjusted for certain non-recurring transactions relating to the movement in contingent consideration (2021: based on 3-year average loss before tax adjusted for certain non-recurring transactions relating to the movement in contingent consideration)

An overview of the scope of our audit

Our Group audit was scoped by obtaining an understanding of the Group and its environment, including the Group's system of internal control, and assessing the risks of material misstatement in the financial statements. We also addressed the risk of management override of internal controls, including assessing whether there was evidence of bias by the Directors that may have represented a risk of material misstatement.

The Group comprises two UK incorporated companies (including Itaconix Plc) and one US trading component.

Based on our assessment of the Group, the parent company, Itaconix Plc, and the US trading component, were identified as significant components and were subject to full scope audit for Group reporting purposes. The US component accounted for 99% (2021: 99%), of the Group's revenue and 100% of the Group's loss before tax

(2021: 100%). A full scope statutory audit was completed on the other UK incorporated entity with targeted audit procedures performed over key risks. All procedures were performed by the Group audit team.

We also obtained an understanding of the internal control environment related to the financial reporting process and assessed the appropriateness, completeness and accuracy of Group journals and other adjustments performed on consolidation.

Key audit matters

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

Key audit matter		How the scope of our audit addressed the key audit matter
Revenue Recognition *Details of the Group's* *accounting policies applied during the period are given* *in notes 2 & 4 on pages 51 & 56 of the Consolidated Financial Statements*	The amounts reported in relation to revenue represent information of significant interest to many users of the financial statements. This puts revenue at a greater risk of manipulation, bias and misstatement. Having regard to the potential for fraud in relation to revenue recognition, we considered there to be a significant audit risk arising from accelerated recognition of revenue. The key audit matter related to revenue recognition is as follows: • There is a risk that the Group's revenue (generated from the sale of its core products for the homecare, industrial and personal care sectors) around the year-end has not been recognised appropriately in line with their respective performance obligations, taking account of contracted delivery terms to customers and that the revenue policy itself is not in accordance with appropriate accounting standards.	With regards to the risk of material misstatement related to the accelerated recognition of revenue, we performed the following procedures: • We assessed whether the revenue recognition policies adopted by the Group comply with accounting standards by comparing the accounting policy to the requirements of IFRS 15 – Revenue from contracts with customers; • Tested a sample of transactions occurring either side of the balance sheet date to invoice and evidence of delivery to check that they have been recorded in the correct period in accordance with agreed delivery terms; • For a sample of transactions, in particular around the year end, we assessed compliance with IFRS 15 Revenue Recognition requirements and verified whether revenue is recorded appropriately, in line with respective performance obligations when satisfied, with reference to despatch records signed by courier on despatch of goods and other supporting information including receipt of funds and proof of delivery; and • Tested the journal population posted around the year-end to revenue by selecting a sample and agreeing to supporting documentation and considered if volume and average revenue recorded is in line with the expectation (based on historic trends). **Key observations:** Based on the procedures performed, we consider that revenue has been recognised appropriately and in accordance with the Group's revenue recognition accounting policy.

Our application of materiality

We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements. We consider materiality to be the magnitude by which misstatements, including omissions, could influence the economic decisions of reasonable users that are taken on the basis of the financial statements.

In order to reduce to an appropriately low level the probability that any misstatements exceed materiality, we use a lower materiality level, performance materiality, to determine the extent of testing needed. Importantly, misstatements below these levels will not necessarily be evaluated as immaterial as we also take account of the nature of identified misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole and performance materiality as follows:

	Group financial statements		Parent company financial statements	
	2022	2021	2022	2021
Materiality	$86,000	$100,000	$21,400	$30,700
Basis for determining materiality	Based on 5% of the 3-year average loss before tax, adjusted for certain non-recurring transactions relating to the movement in contingent consideration in the year.		2% of Total Assets	
Rationale for the benchmark applied	This was considered to be a primary key performance indicator as it is relevant to the users of the financial statements which is evidenced by this metric being used to address the performance of the business by the board and is consistently referenced within the RNS announcements released by the group.		Total Assets is considered to be a primary key performance indicator as it is relevant to the users of the financial statements for a holding company.	
Performance materiality	$64,500	$75,000	$16,000	$23,000
Basis for determining performance materiality	Performance materiality was set at 75% (2021: 75%). In reaching our conclusion on the level of performance materiality to be applied, our analysis included assessment of a number of factors including the expected total value of known and likely misstatements (based on past experience), our knowledge of the group's and parent company's internal controls and management's attitude towards proposed adjustments.			

Component materiality

For the purposes of our Group audit opinion, we set materiality for the significant component of the Group, apart from the Parent Company whose materiality is set out above, at 75% of Group materiality (2021: 75%) based on the size and our assessment of the risk of material misstatement of that component. Component materiality was $64,500 (2021: $75,000). In the audit of the component, we further applied a performance materiality level of 75% (2021: 75%) of the component materiality to our testing to ensure that the risk of errors exceeding component materiality was appropriately mitigated.

Reporting threshold

We agreed with the Audit Committee that we would report to them all individual audit differences in excess of $4,300 (2021: $5,000). We also agreed to report differences below this threshold that, in our view, warranted reporting on qualitative grounds.

Other information

The Directors are responsible for the other information. The other information comprises the information included in the Annual report and Accounts 2022 other than the financial statements and our auditor's report thereon. 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.

Other Companies Act 2006 reporting

Based on the responsibilities described below and our work performed during the course of the audit, we are required by the Companies Act 2006 and ISAs (UK) to report on certain opinions and matters as described below.

Strategic report and Directors' report	In our opinion, based on the work undertaken in the course of the audit: • the information given in the Strategic report and the Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and • the Strategic report and the Directors' report have been prepared in accordance with applicable legal requirements. In the light of the knowledge and understanding of the Group and Parent Company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the Directors' report.
Matters on which we are required to report by exception	We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion: • adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or • the Parent Company financial statements are not in agreement with the accounting records and returns; or • certain disclosures of Directors' remuneration specified by law are not made; or • we have not received all the information and explanations we require for our audit.

Responsibilities of Directors

As explained more fully in the statement of Directors' responsibilities, 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 Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

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

Extent to which the audit was capable of detecting irregularities, including fraud

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

- We have identified and assessed the potential risks related to non-compliance with laws and regulations by:
    - Obtaining an understanding of the legal and regulatory framework in which the Group operates. We considered provisions of other laws and regulations that have a direct effect on the financial statements but compliance with which may be fundamental to the Group's ability to operate. The significant laws were considered to be UK adopted international accounting standards, the Companies Act 2006 and relevant UK and US tax regulations.
    - The audit team received training prior to performing the audit procedures required to provide assurance over compliance with relevant UK and US laws and regulations.
    - Obtaining an understanding of how the Group is complying with those frameworks by making enquiries of directors and management, those responsible for legal and compliance procedures and the Company Secretary. We corroborated our enquiries through our review of board minutes and papers provided to the Audit Committee.
    - Considering the processes and controls that the Group has established and the controls in place to mitigate risks in relation to non-compliance with laws and regulations.
    - Making enquiry of Group's directors and management and external legal counsel concerning actual and potential litigation and claims.

      Obtaining third party confirmations directly from the Group's external legal counsel to assess the completeness of claims and legal matters.
    - Review of financial statements disclosures and testing to supporting documentation.
- We assessed the susceptibility of the Group's financial statements to material misstatement, including how fraud might occur. Our procedures included:
    - Our audit planning identified fraud risks in relation to:
        - Revenue recognition (cut-off) – as relating to accelerated recognition of revenue (which has been assessed as a Key Audit Matter); and
        - Management override of controls.
    - We made enquiry of Group management to understand where they considered there was a susceptibility to fraud and regarding detection and response to the risk of fraud and any knowledge of actual, suspected or alleged fraud.
    - Reading the minutes of meetings of those charged with governance for any known or suspected instances of fraud.
    - We considered the processes and controls that the Group has established to address risks identified, or that otherwise prevent, deter and detect fraud; and how management monitors the processes and controls.
    - Our procedures included journal entry testing, with a focus on large or unusual transactions based on our knowledge of the business by agreeing these to supporting documentation.
    - Assessing whether the judgements made in making accounting estimates are indicative of potential bias.
    - Performing analytical procedures to identify any unusual or unexpected relationships which may indicate risks of misstatement due to fraud.

- In response to the risk of fraud in revenue recognition, we have performed the procedures set out in the key audit matter section of our report.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members who were all deemed to have appropriate competence and capabilities and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery, misrepresentations or through collusion. There are inherent limitations in the audit procedures performed and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we are to become aware of it.

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

Use of our report

This report is made solely to the Parent 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 Parent 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 Parent Company and the Parent Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Iain Henderson (Senior Statutory Auditor)

For and on behalf of BDO LLP, Statutory Auditor

London, UK

2 June 2023

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

CONSOLIDATED INCOME STATEMENT
For the year ended 31 December 2022

	Notes	2022 $'000	2021 $'000
Revenue	4	**5,600**	2,596
Cost of sales		**(4,113)**	(1,896)
Gross profit		**1,487**	700
Other operating income	5	**-**	203
Administrative expenses		**(3,804)**	(2,911)
Operating loss before exceptional items	6	**(2,317)**	(2,008)
Exceptional (expense) / income on revaluation of contingent consideration	17	**(138)**	1,560
Operating loss before tax from operations		**(2,455)**	(448)
Finance income (expense)	8	**-**	-
Loss before tax		**(2,455)**	(448)
Taxation charge	9	**(8)**	(7)
Loss after tax		**(2,463)**	(455)
Basic loss per share	10	**(0.5)**	(0.1)
Diluted loss per share	10	**(0.5)**	(0.1)

The accompanying notes 1 to 26 form an integral part of the financial statements.

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022

	Notes	2022 $'000	2021 $'000
Loss for the year		**(2,463)**	(455)
Items that will be reclassified subsequently to profit or loss			
Exchange gain in translation of foreign operations		**93**	17
Total comprehensive loss for the year		**(2,370)**	(438)
Attributable to:			
Equity holders of parent		**(2,370)**	(438)

The accompanying notes 1 to 26 form an integral part of the financial statements.

CONSOLIDATED AND COMPANY BALANCE SHEETS

At 31 December 2022

		Group		Company	
		31 Dec 2022	31 Dec 2021	**31 Dec 2022**	31 Dec 2021
	Notes	**$'000**	$'000	**$'000**	$'000
Non-current assets					
Property, plant and equipment	12	**301**	402	-	-
Right-of-use assets	19	**343**	545	-	-
Investment in subsidiary undertakings	11	**-**	-	**1,513**	1,074
		644	947	**1,513**	1,074
Current assets					
Inventories	13	**1,119**	1,369	**-**	-
Trade and other receivables	14	**164**	280	**30**	17
Cash and cash equivalents	15	**597**	683	**79**	444
		1,880	2,332	**109**	461
Total assets		**2,524**	3,279	**1,622**	1,535
Financed by					
Equity shareholders' funds					
Equity share capital	20	**5,959**	5,873	**5,959**	5,873
Equity share premium		**47,942**	47,641	**47,942**	47,641
Own shares reserve		**(5)**	(5)	**(5)**	(5)
Merger reserve		**31,343**	31,343	**3,582**	3,582
Share based payment reserve	22	**643**	10,386	**643**	1,309
Foreign translation reserve		**(101)**	(194)	**(2,213)**	(2,165)
Retained deficit		**(86,556)**	(94,395)	**(55,709)**	(55,965)
Total equity		**(775)**	649	**199**	270
Non-current liabilities					
Contingent consideration	17	**-**	1,116	**-**	1,116
Lease liabilities	19	**119**	348	**-**	-
		119	1,464	**-**	1,116
Current liabilities					
Trade and other payables	16	**1,866**	1,020	**289**	149
Contingent consideration	17	**1,134**	-	**1,134**	-
Lease liabilities	19	**180**	146	**-**	-
		3,180	1,166	**1,423**	149
Total liabilities		**3,299**	2,630	**1,423**	1,265
Total equity and liabilities		**2,524**	3,279	**1,622**	1,535

CONSOLIDATED AND COMPANY BALANCE SHEETS

At 31 December 2022

The Company has taken advantage of the exemption allowed under section 408 of the Companies Act 2008 and has not presented its own profit and loss in these financial statements. The loss for the year for the Company amounted to $969k (2021: loss of $448k). The financial statements of Itaconix plc, registered number 08024489, were approved by the Board of Directors for issue on 2 June 2023.

John R. Shaw	**Peter Nieuwenhuizen**
Director	Director

The accompanying notes 1 to 26 form an integral part of the financial statements

CONSOLIDATED AND COMPANY STATEMENTS OF CHANGES IN EQUITY

For the year ended 31 December 2022

Consolidated statement of changes in equity

	Equity share capital	Equity share premium	Own shares reserve	Merger reserve	Share based payment reserve	Foreign translation reserve	Retained deficit	Total
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
At 1 January 2021	5,718	46,135	(5)	31,343	10,335	(211)	(93,940)	(625)
Loss for the year	–	–	–	–	–	–	(455)	(455)
Contingent consideration	26	120	–	–	–	–	–	146
Share issuance proceeds	129	1,428	–	–	–	–	–	1,557
Share issuance expenses	–	(42)	–	–	–	–	–	(42)
Exchange differences on translation of foreign operations	–	–	–	–	–	17	–	17
Share based payments	–	–	–	–	51	–	–	51
At 31 December 2021	5,873	47,641	(5)	31,343	10,386	(194)	(94,395)	649
Loss for the year	–	–	–	–	–	–	(2,463)	(2,463)
Share issuance proceeds	86	301	–	–	–	–	–	387
Exchange differences on translation of foreign operations	–	–	–	–	–	93	–	93
Plan termination (see note 22)	–	–	–	–	(10,302)	–	10,302	–
Share based payments	–	–	–	–	559	–	–	559
At 31 December 2022	**5,959**	**47,942**	**(5)**	**31,343**	**643**	**(101)**	**(86,556)**	**(775)**

Company statement of changes in equity

	Equity share capital	Equity share premium	Own shares reserve	Merger reserve	Share based payment reserve	Foreign translation reserve	Retained deficit	Total
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
At 1 January 2021	5,718	46,135	(5)	3,582	1,258	(2,150)	(55,517)	(979)
Loss for the year	–	–	–	–	–	–	(448)	(448)
Contingent consideration	26	120	–	–	–	–	–	146
Share issuance proceeds	129	1,428	–	–	–	–	–	1,557
Share issuance expenses	–	(42)	–	–	–	–	–	(42)
Exchange differences on translation of foreign operations	–	–	–	–	–	(15)	–	(15)
Share based payments	–	–	–	–	51	–	–	51
At 31 December 2021	5,873	47,641	(5)	3,582	1,309	(2,165)	(55,965)	270
Loss for the year	–	–	–	–	–	–	(969)	(969)
Share issuance proceeds	86	301	–	–	–	–	–	387
Exchange differences on translation of foreign operations	–	–	–	–	–	(48)	–	(48)
Plan termination	–	–	–	–	(1,225)	–	1,225	–
Share based payments	–	–	–	–	559	–	–	559
At 31 December 2022	**5,959**	**47,942**	**(5)**	**3,582**	**643**	**(2,213)**	**(55,709)**	**199**

The accompanying notes 1 to 26 form an integral part of the financial statements.

CONSOLIDATED AND COMPANY STATEMENTS OF CHANGES IN EQUITY

For the year ended 31 December 2022

The reserves described above have the purposes described below:

Share capital

Amount subscribed for share capital at par value.

Share premium

Amount subscribed for share capital in excess of nominal value less the cost of issuance of shares.

Own shares reserve

The reserve records the nominal value of shares purchased and held by the Employee Benefit Trust to satisfy the future exercise of options under the Group's share option schemes.

Merger reserve

This reserve arose as a result of a common control business combination on the formation of the Group. The premium on the issue of shares as part of a business combination is credited to this reserve.

Share based payment reserve

This reserve records the credit to equity in respect of the share based payment cost.

Foreign exchange translation reserve

This reserve arises on the translation of the assets and liabilities of overseas subsidiaries.

CONSOLIDATED AND COMPANY STATEMENTS OF CASH FLOWS

For the year ended 31 December 2022

		Group		Company	
		2022	2021	**2022**	2021
	Notes	**$'000**	**$'000**	**$'000**	**$'000**
Net cash outflow from operating activities	21	**(219)**	(2,023)	**(663)**	(655)
Proceeds from sale of property, plant and equipment		**-**	20	**-**	-
Purchase of property, plant and equipment		**(59)**	(68)	**-**	-
Cash loaned to subsidiary undertakings		**-**	-	**(89)**	(1,350)
Net cash outflow from investing activities		**(59)**	(48)	**(89)**	(1,350)
Cash received from issue of shares		**387**	1,557	**387**	1,557
Transactions costs paid on the issue of shares		**-**	(42)	**-**	(42)
Repayment of lease liability		**(138)**	(167)	**-**	-
Interest paid - leases		**(57)**	(42)	**-**	-
Net cash inflow from financing activities		**192**	1,306	**387**	1,515
Net outflow in cash and cash equivalents		**(86)**	(765)	**(365)**	(490)
Cash and cash equivalents at beginning of year		**683**	1,448	**444**	934
Cash and cash equivalents at end of year		**597**	683	**79**	444

The accompanying notes 1 to 26 form an integral part of the financial statements

1. General Information

Itaconix plc ("the Parent Company") is a public limited company incorporated in England and Wales. The address of its registered office and principal place of business is set out on page 72. The principal accounting policies adopted by the Group are set out in note 2. The nature of the Group's operations and its principal activities are set out in the Strategic Report. The principal activities of the Parent Company and its subsidiaries are described in note 4. The financial statements have been presented in US Dollars and rounded to the nearest thousand ($'000) unless otherwise indicated.

2. Accounting policies

Basis of presentation

The Group and parent company financial statements have been prepared in accordance with UK adopted International Accounting Standards ("IFRS") and the provisions of the Companies Act 2006. The financial information has been prepared on the historical cost basis except that financial instruments are stated at their fair value. Amounts are rounded to the nearest thousand, unless otherwise stated.

While the Parent Company's functional currency is British Pounds Sterling, the Group's and Parent company's financial statements have been presented in US Dollars. The directors believe this better reflects the underlying nature of the business. Approximately ninety-five per cent of the Group's revenue and operating costs are denominated in US Dollars. The exchange rates used for translation of British Pounds Sterling amounts are 1.2102 US Dollars to British Pounds Sterling as at 31 December 2022 and 1.2258 US Dollars to British Pounds Sterling as the average rate prevailing during 2022.

Itaconix applied all standards and interpretations endorsed by the UK Endorsement Board (UKEB) that were effective as of 1 January 2022. The accounting policies set out below have, unless otherwise stated, been applied consistently to all years presented in this financial information.

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

Adoption of new and revised standards

There are no new standards impacting the Group that have been adopted in the annual financial statements for the year ended 31 December 2022, which have given rise to material changes in the Group's accounting policies.

Going concern

The financial statements have been prepared on a going concern basis. The Directors have reviewed the Company's and the Group's going concern position taking account its current business activities, budgeted performance and the factors likely to affect its future development, set out in the Annual Report, and including the Group's objectives, policies and processes for managing its working capital, its financial risk management objectives and its exposure to credit and liquidity risks.

The Group made a loss before exceptional items for the year of $2,317k, had Net Operating Assets at the period end of $359k and a Net Cash Outflow from Operating Activities of $219k. Primarily, the Group meets its day to day working capital requirements through existing cash resources and had on hand cash, cash equivalents and short-term deposits at the balance sheet date of $597k.

During the year, the Group maintain a flat cost base of expenditures and successfully raised gross proceeds of $0.4m. Post year end, the Group successfully raised gross proceeds of $12.7m to enable the Group and Parent Company to continue to execute its growth plans and for general working capital purposes.

The Directors have reviewed the Group's cash flow forecasts covering a period of at least 12 months from the date of approval of the financial statements, which foresee that the Group will be able to meet its liabilities as they fall due. However, the success of the business is dependent on customers continuing to purchase our products in order to increase revenue and profit growth and continuing to control the Group and Parent Company's cost base.

The Directors believe that, taken as a whole, the factors described above enable the Parent Company and Group to be and continue as a going concern for the foreseeable future. The financial statements do not include the adjustments that would be required if the Parent Company and the Group were unable to continue as a going concern.

Consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company (its subsidiaries) made up to 31 December each year. The Company controls an investee if, and only if the Company has the following:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure of rights, to variable returns from its involvement with the investee; and
- The ability to use its power over the investee to affect its returns.

Where necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies used into line with those used by the Group.

All intra-group transactions, balances, income and expenses are eliminated on consolidation.

In accordance with Section 408 of the Companies Act 2006, no profit and loss account is presented for the Company.

Business combinations and contingent consideration

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at the acquisition date fair value, and the amount of any non-controlling interest in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interest in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition related costs are expensed as incurred and included in administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration are recognised in accordance with IFRS 9 in profit or loss.

The fair value of contingent consideration is determined by reference to the projected financial performance in relation to the specific contingent consideration criteria for each acquisition.

Revenue recognition

Revenue is recognised to the extent that services have been delivered and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty.

Revenue from the sale of goods is recognised when performance obligations have been satisfied. The delivery date is usually the date on which performance obligations have been satisfied. However, where goods are supplied when title does not irrevocably pass on delivery, it may not be appropriate to recognise all the revenue immediately. The Group provides for potential sales returns based on its actual experience of returns from customers in such cases. Where it has no such history it makes estimates by reference to minimum sales commitments in the relevant contract, or by reference, where available, to customer retail sales data or customer inventory levels at the financial year end, or based on other reasonable and relevant judgements.

Leases

Leases are accounted for under IFRS 16: Leases. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases.

IFRS 16 requires lessees to recognize a lease liability that reflects the net present value of future lease payments and a corresponding “right-of-use asset” in all lease contracts, although lessees may elect not to recognize lease liabilities and right-of-use assets in respect of short-term leases or leases of assets of low value.

The Group has elected not to recognize right-of-use assets and lease liabilities in respect of certain leases of office equipment of low value or of short term. The lease payments associated with these leases is recognized as an expense on a straight-line basis over the lease term.

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

The Group recognizes a right-of-use asset and a corresponding lease liability at the lease commencement date. The lease liability is initially measured at the present value of the following lease payments:

- fixed payments;
- variable payments that are based on index or rate;
- the exercise price of any extension or purchase option if reasonably certain to be exercised;
- penalties for terminating the lease, if relevant; and
- other payments to the landlord relating to the leased asset which are determined to be in substance lease payments.

Judgement is applied to determine whether common area expenses paid to the landlord are determined to be lease or non-lease payments. (See note 3)

The lease payments are discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group’s incremental borrowing rate. The Group has used its incremental borrowing rate as the discount rate.

The right-of-use assets are initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs. The right-of-use assets are depreciated over the period of the lease term, or, if earlier, the useful life of the asset, using the straight-line method. The lease term includes periods covered by an option to extend, if the Group is reasonably certain to exercise that option. In addition, the right-of-use assets may during the lease term be reduced by impairment losses, if any, or adjusted for certain remeasurements of the lease liability.

On 28 May 2020, the IASB issued final amendments to IFRS 16 related to Covid-19 rent concessions for lessees. The amendments modify the requirements of IFRS 16 to permit lessees to not apply modification accounting to certain leases where the contractual terms have been affected due to Covid-19 (e.g. rent holidays or other rent concessions). The amendments are effective for periods beginning on or after 1 June 2020, with earlier application permitted. The Group did not adopt this standard as no such concessions were applicable.

Government funding, grants and research income

Government grants and research income are recognised as a credit to the income statement where there is reasonable assurance that they will be received, and all associated conditions will be complied with.

When the income relates to an expense item, it is recognised as income over the period necessary to match it on a systematic basis to the costs that it is intended to compensate. Where the income relates to an asset, it is recognised as deferred income and released to income in equal annual amounts over the expected useful life of the related asset.

The Paycheck Protection Programme ('PPP') loan received in 2020, was initially recognised as a deferred income liability on the balance sheet of the Group and remained as such until the loan was forgiven by the Small Business Administration in the United States, which evidenced there was reasonable assurance that the entity complied with the conditions associated with the terms of the PPP. At that point, the monies were released to the income statement as an income-related grant and presented as other operating income.

Research and development costs

Research costs are expensed as incurred. Development expenditure on an individual project is recognised as an intangible asset only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the asset and the ability to measure reliably the expenditure during development.

Following initial recognition of the development expenditure as an asset, the cost model is applied requiring the asset to be carried at cost less any accumulated amortisation and accumulated impairment losses. Amortisation of the asset begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit. During the period of development, the asset is tested for impairment annually.

Foreign currencies

Transactions in foreign currencies are translated at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities in foreign currencies are translated at the rates of exchange ruling at the year-end date. Non-monetary items that are measured at historical cost in a foreign currency are translated at the exchange rate at the date of the transaction. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

Any exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were initially recorded are recognised in the income statement in the period in which they arise. Exchange differences on non-monetary items are recognised in the statement of comprehensive income to the extent that they relate to a gain or loss on that non-monetary item taken to the statement of comprehensive income, otherwise such gains and losses are recognised in the income statement.

The assets and liabilities in the financial statements of foreign subsidiaries and those of the parent company where the functional and presentational currency differ, are translated at the rate of exchange ruling at the year-end date. Income and expenses are translated at the actual rate. The exchange differences arising from the retranslation of the opening net investment in subsidiaries are taken directly to the 'Foreign currency retranslation reserve' in equity. On disposal of a foreign operation the cumulative translation differences (including, if applicable, gains and losses on related hedges) are transferred to the income statement as part of the gain or loss on disposal.

Property, plant and equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and any accumulated impairment in value. Such cost includes the cost of replacing part of the plant and equipment when that cost is incurred, if the recognition criteria are met.

Depreciation is calculated to write off the cost less estimated residual value of all tangible assets over their expected useful economic life on a straight-line basis. The rates generally applicable are:

Plant and equipment	4-7 years
Short leasehold improvements	5 years
Computer and office equipment	3 years

Financial assets

Financial assets are recognised in Itaconix's and the Company's statement of financial position when Itaconix and the Company become party to the contractual provisions of the instrument. Under IFRS 9 the classification of financial assets is based both on the business model and cash flow type under which the assets are held. There are three principal classification categories for financial assets: amortised cost; fair value through other comprehensive income; and fair value through profit or loss. Itaconix has not classified any of its financial assets as fair value through other comprehensive income.

Amortised cost

These assets are non-derivative financial assets held under the 'held to collect' business model and attracting cash flows that are solely payments of principal and interest. They comprise trade and other receivables and cash and cash equivalents. They are initially measured at fair value plus transaction costs, and are subsequently carried at amortised cost using the effective interest rate method, less provision for impairment.

Impairment provisions for trade and other receivables are calculated using an expected credit loss model. Under this model, impairment provisions are recognised to reflect expected credit losses based on combination of historic and forward-looking information, the amount of such a provision being the difference between the net carrying amount and the present value of the future expected cash flows associated with the impaired receivable. For trade receivables, which are reported net; such provisions are recorded in a separate allowance account. On confirmation that the trade receivable will not be collectable, the gross carrying value of the asset is written off against the associated provision.

Cash, cash equivalents and investments

Cash and cash equivalents in the balance sheet comprise cash at bank and in hand.

Income taxes

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates and laws that are enacted or substantively enacted by the balance sheet date.

Deferred income tax is recognised on all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements, with the following exceptions:

- Where the temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss; and
- Deferred income tax assets are recognised only to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, carried forward tax credits or tax losses can be utilised.

Deferred income tax assets and liabilities are measured on an undiscounted basis at the tax rates that are expected to apply when the related asset is realised or liability is settled, based on tax rates and laws enacted or substantively enacted at the balance sheet date.

Income tax is charged or credited directly to equity if it relates to items that are credited or charged to equity. Otherwise income tax is recognised in the income statement.

Financial liabilities

Financial liabilities are classified as either financial liabilities at fair value through profit or loss or other financial liabilities.

Financial liabilities at fair value through profit or loss

Financial liabilities are stated at fair value with differences taken to the consolidated income statement. Interest on financial liabilities up to maturity is included in the finance costs line item in the consolidated income statement.

Trade and other payables

Trade payables and other payables are not interest bearing and are stated at their full value on initial recognition. For disclosure purposes, the fair values of trade and other payables are estimated at the present value of future cash flows, discounted at the market rate of interest at the reporting date. As trade payables and other payables are short term in nature as at the reporting date, the carrying value is considered to be a reasonable approximation of fair value.

Other financial liabilities

Other financial liabilities are initially measured at fair value, net of transaction costs. They are subsequently measured at amortised costs using the effective interest method, with interest recognised on an effective rate basis.

Inventory valuation

Inventories are stated at the lower of cost and net realisable value. Cost includes all costs incurred in bringing each product to its present location and condition.

Share based payments

The parent company issues equity-settled share-based payments to certain employees and these payments are measured at fair value (excluding the effect of non-market-based vesting conditions) at the date of the grant using appropriate pricing models. The fair value determined at the grant date of the equity-settled share-based payments is expensed on a graded basis over the vesting period, based on the Company's estimate of shares that will eventually vest and adjusted for the effect of non-market-based vesting conditions.

At the date of each statement of financial position, the parent company revises its estimate of the number of equity instruments that are expected to become exercisable. It recognises the impact of the revision of original estimates, if any, in the income statement, and a corresponding adjustment is made to equity over the remaining vesting period. The fair value of the awards and ultimate expense are not adjusted on a change in market vesting conditions during the vesting period.

The value of share-based payment is taken directly to reserves and the charge for the period is recorded in the income statement. Itaconix's scheme, which awards shares in the parent entity, includes recipients who are employees in all subsidiaries. In the consolidated financial statements, the transaction is treated as an equity-settled share-based payment, as Itaconix has received services in consideration for equity instruments. An expense is recognised in the Group income statement for the fair value of share-based payment over the vesting year, with a credit recognised in equity.

In the parent company's and subsidiaries' financial statements, the awards, in proportion to the recipients who are employees in said subsidiary, are treated as an equity-settled share-based payment, as the subsidiaries do not have an obligation to settle the award. An expense for the grant date fair value of the award is recognised over the vesting year, with a credit recognised in equity on the subsidiary's accounts. This credit is treated as a capital contribution. In the parent company's financial statements, there is no share-based payment charge where the recipients are employed by a subsidiary, with the parent company recognising an increase in the investment in the subsidiaries effecting as capital contribution from the parent company and a credit to equity.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments issued by the Group are recorded at the proceeds received, net of direct issue costs. Dividends and distributions relating to equity instruments are debited direct to equity.

Exceptional items

The Group has classified the finance income, movement on investment in associate, organizational restructuring, and the fair value adjustment of the contingent consideration as exceptional items in the income statement. These items are not considered to reoccur and are of such significance to the results that they have been presented as exceptional to provide a fair and balanced presentation in the financial statements.

3. Critical accounting assumptions and key sources of estimation uncertainty

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent assets and liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

Judgements and estimates

In the process of applying the Group's accounting policies, management has made a number of judgements and estimates. Those which have the most significant effect on the amounts recognised in the financial statements are summarised below:

Judgements

Fair value of Group indebtedness (Parent company only)

The fair value of amounts owing from Group companies is impaired in those cases where the subsidiary is, at the balance sheet date, deemed to be both illiquid and not yet generating positive cash flows, or otherwise highly unlikely to repay such indebtedness in the longer term (See note 14).

IFRS 16 – Lease Accounting - lease term, non-lease components

The determination of the lease term for some lease contracts of the Group is based on the consideration as to whether the Group is reasonably certain to exercise lessee options.

Judgement is applied to determine whether common area expenses paid to the landlord are determined to be lease or non-lease payments. Consideration is made to the nature and variability of costs incurred and other terms within such arrangements (See note 19).

Estimates

Share based payment cost

The estimation of share based payment costs requires the selection of an appropriate valuation model, considerations as to the inputs necessary for the valuation model chosen and the estimation of the number of awards that will ultimately vest, the expected term of the option, inputs which arise from judgements relating to the probability of meeting non-market performance conditions and the continuing participation of employees (See note 22).

4. Revenue

Revenue recognised in the Group income statement is analysed as follows:

Geographical information

	Revenues		*Net assets*	
	2022	2021	**2022**	2021
	$'000	$'000	**$'000**	$'000
North America	**5,078**	2,410	**104**	1,106
Europe	**522**	186	**(879)**	(457)
	5,600	2,596	**(775)**	649

The revenue information is based on the location of the customer. Net assets of the Group (being total assets less total liabilities) are attributable to geographical locations.

End Market information

Revenue for the Group are comprised of three primary end market segments, as identified below:

	2022	2021
	$'000	$'000
Cleaning	**5,070**	1,812
Hygiene	**324**	509
Beauty	**137**	220
Other	**69**	55
	5,600	2,596

Segment information

The Group has two business segments. Performance Ingredients develops, produces and sells proprietary specialty polymers that are used as functional ingredients to meet customers' needs in cleaning, beauty and hygiene products. Formulation Solutions provides technical services and ingredient supplies for formulated products developed for customers based on Performance Ingredients. These segments make up the continuing operations. Core Operations include development expense, general and administrative expense, professional fees, and governance costs to progress and grow the Groups operations.

	Performance Ingredients $'000	*Formulation Solutions $'000*	*Core Operations $'000*	**2022 $'000**
Revenue				
Sale of goods	4,608	992	-	**5,600**
Results:				
Depreciation and amortisation	(286)	-	-	**(286)**
Cost of sales	(2,914)	(913)	-	**(3,827)**
Gross profit	1,408	79	-	**1,487**
Administrative expense	-	-	(3,804)	**(3,804)**
Exceptional expense	-	-	(138)	**(138)**
Taxation charge	-	-	(8)	**(8)**
Segment performance	1,408	79	(3,950)	**(2,463)**
Operating assets	1,825	-	699	**2,524**
Operating liabilities	(1,244)	(1)	(920)	**(2,165)**
Other disclosure:				
Capital expenditure*	59	-	**-**	**59**

	Performance Ingredients $'000	*Formulation Solutions $'000*	*Core Operations $'000*	2021 $'000
Revenue				
Sale of goods	2,254	342	-	2,596
Results:				
Depreciation and amortisation	(280)	-	-	(280)
Cost of sales	(1,290)	(326)	-	(1,616)
Gross profit	684	16	-	700
Other operating income	-	-	203	203
Administrative expense	-	-	(2,911)	(2,911)
Exceptional income	-	-	1,560	1,560
Taxation charge	-	-	(7)	(7)
Segment performance	684	16	(1,155)	(455)
Operating assets	2,460	-	819	3,279
Operating liabilities	(877)	-	(637)	(1,514)
Other disclosure:				
Capital expenditure*	68	-	**-**	68

*Capital expenditure consists of additions of property, plant and equipment.

NOTES TO FINANCIAL STATEMENTS

For the year ended 31 December 2022

5. Other operating income

Other operating income arises mainly from sale of fixed assets and government funding, grants and research income. Since it is not considered to be part of the main revenue generating activities, the Group presents this income separately from revenue.

	2022 $'000	2021 $'000
Profit on sale of assets	-	20
Funding, grant and research income	-	183
	-	203

6. Group operating loss

This is stated after charging / (crediting):

	2022 $'000	2021 $'000
Auditor's remuneration:		
Audit of the financial statements	10	10
Audit of the subsidiaries	145	115
Non-audit services	-	-
Total fees	155	125
Equity settled share based payment expense	559	51
Depreciation of owned assets (note 12)	160	167
Amortisation of right-of-use assets (note 19)	202	201
Research and development expenditure	69	79
Foreign exchange differences	6	-
Funding income related to Covid-19	-	(183)
Profit on disposal of equipment	-	(20)

7. Staff costs

Staff costs for the Group, including Directors, consist of:

	2022 $'000	2021 $'000
Wages and salaries	1,639	1,716
Incentive compensation	334	56
Post-employment benefits	45	41
Equity settled share based payment expense	559	133
	2,577	1,946

Details of Directors' fees are included in the Directors' Remuneration Report on page 26 to 27.

Details of key management personnel fees are included in note 23.

The average monthly number of Group employees, including Directors, during the year was made up as follows:

	2022	2021
	No.	No.
Executive Directors	**1**	1
Non-executive Directors	**2**	3
Research and development	**3**	4
Finance and administration	**2**	2
Sales	**1**	2
Production	**4**	4
Contract staff	**1**	1
	14	17

Itaconix plc had no employees other than the Non-executive Directors.

8. Finance income

	2022	2021
	$’000	$’000
Interest receivable on bank deposits	**-**	-

9. Taxation

	2022	2021
	$’000	$’000
Corporation tax expense		
Prior years’ corporation tax liability	**-**	-
Current year corporation tax liability	**(8)**	(7)
Corporation tax expense	**(8)**	(7)

During the year ended 31 December 2022, the Group had a taxation expense of $8k (2021: $7k) of which relates a provision of $8k for US taxation payable in respect of 2022 by the US subsidiary.

Total tax on loss on ordinary activities

The tax for the year can be reconciled to the loss per the income statement as follows:

	2022	2021
	$’000	$’000
Loss before tax	**(2,455)**	(448)
Loss on ordinary activities multiplied by standard UK corporation tax rate of 19%	**(466)**	(85)
Effects of:		
Disallowed expenses & non-taxable income	**26**	(287)
Adjustments in respect of prior periods	**-**	(2,904)
Other timing differences	**-**	5
Movement in deferred tax not recognised	**432**	3,278
Total tax expense for the year	**(8)**	(7)

Deferred tax

The Group has the following net deferred tax asset which is not recognised:

	2022	2021
	$'000	$'000
Accelerated capital allowances	**3,042**	3,043
Other timing differences	**727**	545
Tax losses carried forward	**13,052**	14,166
Share based payments	**140**	-
	16,961	17,754

The net deferred tax asset is not recognised as there is insufficient evidence of future taxable profits against which the asset will be available for offset. Certain operating losses will expire in 2030 if no profits are generated to offset the loss carry forwards. These losses are also subject to certain regulatory restrictions.

Tax rate and tax rate changes

The main rate of UK corporation tax was 19% from 1 April 2015. An increase in the standard rate of UK corporate tax from 19% to 25% is enacted and will take effect 1 April 2023.

The US federal tax rate is 21% as of 1 January 2018.

10. Loss per share

Basic loss per share is calculated by dividing the loss attributable to ordinary shareholders by the weighted average number of ordinary shares in issue during the year.

	2022	2021
Loss	**$'000**	$'000
Loss for the purposes of basic and diluted loss per share	**(2,463)**	(455)
Weighted average number of ordinary shares for the purposes of basic and diluted loss per share ('000)	**448,096**	438,808
Basic and diluted loss per share	**(0.5)¢**	(0.1)¢

The loss for the period and the weighted average number of ordinary shares for calculating the diluted earnings per share for the period to 31 December 2022 are identical to those used for the basic earnings per share. This is because the outstanding share options (note 22) would have the effect of reducing the loss per ordinary share and would therefore not be dilutive.

11. Investment in subsidiary undertakings

In prior years, management has fully impaired the intangible assets arising on acquisition of Itaconix Corporation and has also impaired the value of the investment in Itaconix Corporation in the Company balance sheet proportionate to its shareholding.

	Company $000
At 1 January 2021	1,084
Foreign translation adjustment	(10)
At 31 December 2021	1,074
Share based payment expense – capital contributed to subsidiary	559
Foreign translation adjustment	(120)
At 31 December 2022	**1,513**

Name	**Principal activity**	**Place of incorporation and operation**	**Proportion of ownership interest**
Direct investments			
Itaconix (U.K.) Limited (1)	UK operating company	England	100%
Itaconix EBT Limited (1)	Trustee of Itaconix employee benefit trust	England	100%
Indirect investments			
Itaconix Corporation (2)	Trading US subsidiary of Itaconix (U.K.) Ltd	USA	100%

(1) The registered address is Fieldfisher, LLP, Riverbank House, 2 Swan Lane, London, EC4R 3TT, UK
(2) The registered address is 2 Marin Way, Stratham, NH 03885, USA

12. Property, plant and equipment

Group	Computer and office equipment $'000	Plant and equipment $'000	Short Leasehold improvements $'000	Total $'000
Cost				
At 1 January 2021	25	1,236	96	1,357
Additions	-	68	-	68
Impairment	-	-	-	-
Disposals	-	-	-	-
At 31 December 2021	25	1,304	96	1,425
Additions	-	59	-	59
Impairment	-	-	-	-
Disposals	-	-	-	-
At 31 December 2022	**25**	**1,363**	**96**	**1,484**
Accumulated depreciation				
At 1 January 2021	25	744	87	856
Charge	-	158	9	167
Eliminated on disposal	-	-	-	-
At 31 December 2021	25	902	96	1,023
Charge	-	160	-	160
Eliminated on disposal	-	-	-	**-**
At 31 December 2022	**25**	**1,062**	**96**	**1,183**
Carrying Amount				
At 31 December 2022	**-**	**301**	**-**	**301**
At 31 December 2021	-	402	-	402

In 2021, some assets were sold and $20k gain was recognized on the sale of the assets.

The parent company has no property, plant and equipment.

13. Inventories

Group	**2022 $'000**	2021 $'000
Raw materials	**313**	266
Work in progress	**196**	28
Finished goods	**688**	1,171
Inventory reserve	**(78)**	(96)
	1,119	1,369

The cost of good recognised in expense was $4,113k (2021: $1,896k).

14. Trade and other receivables

Current assets	Group		Company	
	2022	2021	**2022**	2021
	$'000	$'000	**$'000**	$'000
Trade receivables	**127**	247	**-**	-
Other receivables	**37**	33	**30**	17
	164	280	**30**	17

Trade receivables are non-interest bearing and are generally on 30 day terms.

As at 31 December 2022, no provision (2021: $20k) has been made to trade receivables that were considered to be impaired. The parent company and group have no expected credit loss, as all receivables have been or are expected to be received subsequent to year end.

In respect of the Company:

- Amounts due from Group undertakings have been classified as current. The Company does not consider any of the amounts due from Group undertakings to be overdue.
- As at 31 December 2022 the balance of the fair value of debt from Group undertakings before adjustment for impairment is $48,486k (2021: $47,783k).
- The loss for the year includes a release of fair value impairment of Group indebtedness of $703k resulting from a movement in provisions for this indebtedness (2021: $1,927k).
- There is significant doubt as to the future recoverability of these balances, and as such, a provision for bad and doubtful debts has been raised against the amounts due from Group subsidiaries. To the extent the counter party is unable to do so, the Group does not intend to recall the amounts due, within one year.

As at 31 December, the analysis of the Group's trade receivables that were past due but not impaired is as follows:

Group	Total $'000	Neither past due nor impaired $'000	<30 days $'000	30–60 Days $'000	60–90 days $'000	90–120 days $'000	>120 Days $'000
2022	127	91	13	-	12	11	-
2021	247	233	13	-	-	-	1

The fair value of amounts owing from Group companies to the Company has been impaired to the extent the subsidiary is, at the balance sheet date, both illiquid and not yet generating positive cash flows, or otherwise unlikely to repay such indebtedness. The Group provides against trade receivables where there are significant doubts as to future recoverability based on prior experience, on assessment of the current economic climate and on the length of time that the receivable has been overdue.

Non-current assets	Group		Company	
	2022	2021	**2022**	2021
	$'000	$'000	**$'000**	$'000
Amounts owed by Group companies	-	**-**	-	**-**
	-	**-**	-	**-**

15. Cash and cash equivalents

Cash and cash equivalents comprise cash held by the Group and short-term bank deposits with a maturity of less than three months. The carrying amount of these assets approximates their fair value.

Analysis of cash and cash equivalents disclosed in the cash flow statement:

	Group		Company	
	2022	2021	**2022**	2021
	$'000	$'000	**$'000**	$'000
Cash at bank and in hand	**597**	683	**79**	444

Credit, liquidity and market risk

The Group's principal financial assets are bank balances. The credit risk on these assets is limited because the counterparties are banks with high credit ratings assigned by international credit rating agencies. The Directors have carefully reviewed the carrying value of the Group's financial assets and consider that at the date of this report no impairment in those values is anticipated.

16. Current liabilities

Current liabilities

	Group		Company	
	2022	2021	**2022**	2021
	$'000	$'000	**$'000**	$'000
Trade payables and other payables	**1,002**	663	**83**	21
Accruals	**864**	357	**206**	128
Contingent consideration	**1,134**	-	**1,134**	-
Lease liabilities (note 19)	**180**	146	**-**	-
	3,180	1,166	**1,423**	149

The US Government provided support to US companies during the Covid-19 pandemic through the Small Business Administration (SBA) Paycheck Protection Program (SBA PPP), Itaconix Corporation applied for support under the SBA PPP and received a note payable for $183k in 2020. Interest on the note was at one per cent (1.00%) and was payable over 18 months beginning on 6 December 2020. In May 2021, the SBA formally forgave the SBA PPP loan in full. The forgiveness of the loan was for the outstanding principal and any interest on the loan amount.

The Directors consider that the carrying amount of trade payables, other payables and note payable approximate to their fair value.

17. Contingent Consideration

	Contingent consideration			
	Group		**Company**	
	2022	2021	**2022**	2021
	$'000	**$'000**	**$'000**	**$'000**
As at 1 January	**1,116**	2,853	**1,116**	2,853
Movement in fair value and discounting unwind	**138**	(1,560)	**138**	(1,560)
Foreign exchange effect	**(120)**	(31)	**(120)**	(31)
Settlement of contingent consideration	**-**	(146)	**-**	(146)
As at 31 December	**1,134**	1,116	**1,134**	1,116
Current	**1,134**	-	**1,134**	-
Non-current	**-**	1,116	**-**	1,116

As part of the purchase agreement with the previous owners of Itaconix Corporation, a contingent consideration was agreed with certain of the sellers (the "Sellers"). This would be payable to the Sellers, subject to the achievement of revenue targets for products based on the technology acquired for the calendar years 2017 to 2020, based on 50% of incremental annual net sales value above $3m in 2017 and in excess of the prior year for 2018 to 2020 inclusive (and no less than $3m). The deferred performance-related consideration is capped at $6m in aggregate. Such deferred performance consideration, if any, would be satisfied annually entirely in new ordinary shares of Itaconix plc at the then prevailing price.

During 2018, in conjunction with the fund raise, a restructuring of the contingent consideration was executed. The contingent consideration was restructured into two components:

- A one-time issue of 15 million new Itaconix plc shares to the Sellers.
- The continuation of the previous contingent consideration mechanism (i.e. up to $6m in shares), but with the window of time for potential achievement expanded to the end of 2022 (from the end of 2020) and including all the revenues of the Group (which are primarily from products based on the acquired technology in any event).

It should also be noted that the second component summarised above is intended to serve as an incentive programme for the two members of management (John Shaw and Yvon Durant) who are also Sellers and are entitled to 63% of the total contingent consideration. Accordingly, they were not eligible for any cash bonus or other share incentive programme for the years 2018 to 2020 inclusive. Simultaneously, the merger agreement with the former shareholders of Itaconix Corporation and related agreements were amended to remove various restrictive clauses, including minimum funding requirements and employment terms.

Based on the share price at the execution of the restructuring agreement in 2018, the 15m shares had a value of £0.3m which was expensed immediately.

On 12 April 2021, 1,923,389 shares were issued in settlement of the contingent consideration for 2020 sales in excess of the threshold.

On 8 February 2023, the Company and the Sellers entered into a settlement agreement to conclude this arrangement in full and final settlement of the contingent consideration. The Company issued 18,094,582 shares to the Sellers.

18. Financial instruments

Financial risk management objectives and policies

Itaconix principal financial liabilities comprise trade and other payables and borrowings. The primary purpose of these financial liabilities is to finance the operation. Itaconix has trade and other receivables and cash that derive directly from its operations.

The Company has limited financial liabilities as its primary purpose is to hold investments in other Group companies. The Company's receivables largely relate to funding the operations of Itaconix.

	Group		Company	
	2022	2021	**2022**	2021
	$'000	$'000	**$'000**	$'000
Financial assets				
Cash	**597**	683	**79**	444
Trade and other receivables	**164**	280	**30**	17
Intercompany receivable	**-**	-	**-**	-
Financial liabilities				
Trade and other payables	**(1,866)**	(1,020)	**(289)**	-
Lease liabilities	**(299)**	(494)	**-**	-
Contingent consideration	**(1,134)**	(1,116)	**(1,134)**	(1,116)
Net Financial liabilities	**(2,538)**	(1,667)	**(1,314)**	(655)

The Directors consider that the carrying amount for all financial assets and liabilities approximates to their fair value.

Financial risk management

The Group is exposed to market risk, which includes interest rate risk and currency risk, credit risk and liquidity risk. The senior management oversees the management of these risks and ensures that the financial risk taken is governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with Itaconix's policies and risk appetite.

Liquidity risk

Itaconix seeks to manage financial risk by ensuring adequate liquidity is available to meet foreseeable needs and to invest cash assets safely and profitably. Short-term flexibility is achieved by holding adequate cash balances in Itaconix's main operational currencies, notably UK Sterling and US Dollar.

Credit risk

The principal credit risk for Itaconix arises from its trade receivables. In order to manage credit risk, new customers undergo credit review and customer accounts are regularly reviewed for debt ageing and collection history. As at 31 December 2022, there were no significant credit risk balances.

Credit risk from cash balances with banks and financial institutions is managed in accordance with group policy. Credit risk with respect to cash is managed by carefully selecting the institutions with which cash is deposited.

The financial assets of the Group comprise cash at banks, trade receivables and other receivables. Having reviewed the recoverability of Itaconix's financial assets since the reporting date, as well as the likelihood of future losses over the next 12 months and the lifetime of the assets, the Board does not consider it necessary to recognise any credit losses.

Interest rate risk

The Group finances its operations principally from equity funding and has no debt. Therefore the downside risk associated with changes in interest rates is minimal. No sensitivity analysis has been presented for changes in interest rates as these do not have a material impact on the loss before tax.

Currency risk

During the year, the Group received revenue in USD, EURO and GBP, whilst the majority of its cost base is in USD. These receipts are currently relatively small and tend to be used first to cover costs in the same currency before conversion to USD, and so currency risk impacting cash balances is deemed to be appropriately managed. Intercompany loans from Itaconix plc to Itaconix Corporation to fund the US operations is denominated in GBP and so is translated to USD each period end, potentially resulting in significant debits or credits to the Company's profit and loss but with no cash or other impact on the Group as the loan is eliminated on consolidation. Management notes that such foreign exchange movements are non-cash items. No forward foreign exchange contracts were entered into during the period (2021: nil). At 31 December 2022 the bank balances on hand of foreign currencies were:

Currency	**2022 '000**	2021 '000
GBP	**82**	198

The foreign currency balances are in aggregate lower than at the end of 2021, which is due to the US-based Itaconix Corporation being the main operating entity. No sensitivity analysis has been presented for changes in currency exchange rates, although management will keep the need for sensitivity analysis under regular review going forward.

Liquidity risk

The Group seeks to manage financial risk, to ensure sufficient liquidity is available to meet foreseeable needs and to invest cash assets safely and profitably. The Group's policy through the period has been to ensure continuity of funding by equity. The table below summarises the maturity profile of the Group's financial liabilities at the year-end based on contractual undiscounted payments, specifically noting that the lease liability total is determined as the undiscounted lease payments including interest payable.

At 31 December 2022:

Group	On demand $000	Less than 3 months $000	3 to 12 months $000	1 to 5 years $000	> 5 years $000	Total $000
Trade and other payables	**-**	**1,575**	**291**	**-**	**-**	**1,866**
Contingent consideration	**-**	**1,134**	**-**	**-**	**-**	**1,134**
Lease liability	**-**	**63**	**189**	**169**	**6**	**427**
	-	**2,772**	**480**	**169**	**6**	**3,427**

At 31 December 2021:

Group	On demand $000	Less than 3 months $000	3 to 12 months $000	1 to 5 years $000	> 5 years $000	Total $000
Trade and other payables	-	478	542	-	-	1,020
Contingent consideration	-	-	-	1,116	-	1,116
Lease liability	-	50	143	301	-	494
	-	528	685	1,417	-	2,630

Capital risk management

The Group manages its capital to ensure that it will be able to continue as a going concern while also maximizing the operational potential of the business. The capital structure of Itaconix consists of cash and cash equivalents and equity attributable to equity holders of the Company, comprising issued capital and reserves as disclosed in the consolidated statement of changes in equity. Itaconix is not exposed to externally imposed capital requirements.

Committed facilities

The Group has no floating rate committed borrowing facilities as at 31 December 2022 (2021: nil).

There are no material differences between the fair value of financial instruments and the amount at which they are stated in the financial statements. This is due to the fact that they are of short maturity and if payable on demand the fair value is not materially different from the carrying value.

19. Leases

The Group leases all its facilities from which it operates. The headquarters, production, and main offices are located in Stratham, NH, USA. The facility is approximately 31,000 square feet and the lease runs through to September 2024. Lease payments to September 2024 have been included in the initial recognition of the lease liability.

In applying IFRS 16, the Group used practical expedients permitted by the standard:

- reliance on previous assessments on whether leases are onerous;
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

Right-of-use asset

	Leased Building $'000
At 1 January 2021	746
Additions in year	-
Amortisation	(201)
Exchange differences	-
At 31 December 2021	545
Additions in year	-
Amortisation	(202)
Exchange differences	-
At 31 December 2022	343

Lease liability

	Leased Building $'000
At 1 January 2021	704
Interest expense	42
Lease payments	(252)
Exchange differences	-
At 31 December 2021	494
Interest expense	57
Lease payments	(252)
Exchange differences	-
At 31 December 2022	299

The above table also provides an evaluation of the material changes in the Group's liabilities arising from financial activities, as noted in the Group's Cashflow.

At 31 December 2022, the maturity of the lease (undiscounted) is as follows:

	Up to 3 months $'000	Between 3 months and 12 months $'000	One to two years $'000	Two to five years $'000
Leased building	62	185	164	-
Leased equipment	1	4	5	6

20. Share capital

	Group $000	Company $000
At 1 January 2021 (432,448,253 shares in issue)	5,718	5,718
Issued as a result of an exercise of options		
Nil	-	-
New share issued		
08/04/21 – 1,923,389	26	26
08/06/21 – 9,091,115	129	129
At 31 December 2021 (443,462,757 shares in issue)	5,873	5,873
Issued as a result of an exercise of options		
Nil	-	-
New share issued		
21/04/22 – 6,666,668	86	86
At 31 December 2022 (450,129,425 shares in issue)	5,959	5,959

Itaconix plc (previously Revolymer plc) was incorporated on 10 April 2012.

On 8 April 2021, the Company issued 1,923,389 ordinary shares with a nominal value of 1p per share for 5.52p per share. Shares were issued in settlement of the 2020 contingent consideration liability.

On 8 June 2021, the Company issued 9,091,115 ordinary shares with a nominal value of 1p per share for 12.5p per share. The consideration was received in cash.

On 21 April 2022, the Company issued 6,666,668 ordinary shares with a nominal value of 1p per share for 4.5p per share. The consideration was received in cash.

21. Notes to the statements of cash flow

	Group		Company	
	2022 $'000	2021 $'000	**2022 $'000**	2021 $'000
Loss before tax	**(2,455)**	(448)	**(969)**	(448)
Depreciation of property, plant and equipment	**160**	167	**-**	-
Amortisation of right-of-use asset	**202**	201	**-**	-
Disposal of equipment	**-**	(20)	**-**	-
Impairment of Group indebtedness	**-**	-	**703**	1,927
Reversal of interest income	**-**	-	**(614)**	(577)
Revaluation of deferred consideration, net of foreign exchange effect	**18**	(1,591)	**18**	(1,591)
Loss on foreign exchange	**93**	17	**72**	(4)
Share based payments charge	**559**	51	**-**	51
Taxation	**(8)**	(7)	**-**	-
Operating cash flows before movements in working capital	**(1,431)**	(1,630)	**(791)**	(642)
Decrease / (increase) in inventories	**250**	(8)	**-**	-
Decrease / (increase) in receivables	**116**	183	**(12)**	31
Increase / (decrease) in payables	**846**	(568)	**140**	(44)
Net cash outflow from continuing operating activities	**(219)**	(2,023)	**(663)**	(655)

22. Share based payments

An expense is recognised for share based payments based on the fair value of the awards at the date of grant, the estimated number of shares that will vest and the vesting period of each award.

During the year to 31 December 2022, 1,060,763 share options (2021: nil) were granted under the Itaconix LTIP scheme as approved options ("LTIP Management Options"). US employees did receive share options under the US Option scheme (and with an exercise price of 100% - 110% of the 3-day weighted average of the market price as at the date of grant) ("Employee Options"). Accordingly, the fair value of the LTIP Options and the Employee Options was estimated as at the date of grant using a Black Scholes model. The model took into account the terms and conditions upon which the options were granted using the following assumptions.

On 28 June 2022, the Itaconix LTIP ("Long Term Incentive Plan") and EMI ("Employee Options") scheme expired such that no further options could be issued. At that date, $10.3m of historically charged share based payments expenses (for options previously issued but not exercised) were held in the share based payment reserve in respect of the terminated scheme. They have been reclassified to retained losses in the period.

Grant date

	LTIP Management Options	2019 US Employee Options
2022 Option Grant		
Number of options granted	1,060,763	15,589,002
Exercise price	£0.050-£0.055	£0.050-£0.055
Expected volatility	132.34%	132.34%
Risk free rate	1.69%	1.69%
Expected dividend yield	0%	0%
Expected option life	3 years	3 years
2021 Option Grant		
Number of options granted	nil	2,100,000
Exercise price	£nil	£0.075-£0.081
Expected volatility	nil	224.56%
Risk free rate	nil	0.67%
Expected dividend yield	nil	0%
Expected option life	nil	3-4 years
2020 Option Grant		
Number of options granted	nil	4,900,000
Exercise price	£nil	£0.027
Expected volatility	nil	132.62%
Risk free rate	nil	0.83%
Expected dividend yield	nil	0%
Expected option life	nil	3-4 years

The LTIP Management Options and Employee Options have a vesting period of 36-48 months with no performance criteria.

The valuation methodology used in valuing share-based payments includes the key assumptions shown above. Management have revisited and amended the assumptions in respect of expected volatility and risk free rate in the year to 31 December 2022. The charge for share based payments for the period to 31 December 2022 is accordingly $559k (31 December 2021 $51k).

Summary of all options – vested and unvested

During the year the Company operated an employee share option plan for the benefit employees of the Company.

All options granted in the year are subject to the employee completing a specified period of service. All options lapse when the employee ceases to be employed by the Company.

The following table illustrates the number and weighted average exercise prices (WAEP) of, and movements in, vested and unvested share options outstanding plans during the year:

	2022 Number of shares	**WAEP**	2021 Number of shares	WAEP
Balance at beginning of year	**5,350,000**	**£0.04**	4,900,000	£0.03
Awarded during year	**16,649,765**	**£0.05**	2,100,000	£0.08
Lapsed during the year	**(250,000)**	**£0.02**	(1,650,000)	£0.04
Unvested options at end of year	**21,749,765**	**£0.04**	5,350,000	£0.04

23. Related party transactions

Transactions with key management personnel

Remuneration of key management personnel

The remuneration of the Directors and Executives, who are considered to be the key management personnel of the Company, is set out below in aggregate for each of the categories specified in IAS 24 'Related Party Disclosures'.

	2022 $'000	2021 $'000
Salaries and other short-term employee benefits	**915**	819
Post-employment benefits	**22**	19
Equity settled share based payment expense	**442**	113
	1,379	951

Contingent consideration of key management personnel

Certain key management personnel were partied to the contingent consideration agreement, as disclosed in Note 17, and received shares of stock in February 2023 in final settlement to that agreement.

24. Contingent assets

There were no contingent assets in 2022 (2021 - nil).

25. Contingent liabilities

There were no contingent liabilities in 2022 (2021 - nil).

26. Post Balance Sheet Event

In February 2023, the Company issued 206,082,048 new ordinary shares via placing, subscription, and open offer for $12.7m of funding to continue to execute its growth plans and for general working capital purposes.

In February 2023, the Company and the Contingent Consideration Payees entered into a settlement agreement for the contingent consideration with the issuance of 18,094,582 new ordinary shares.

Corporate Information

Advisors

Auditors

BDO LLP
55 Baker Street
London
W1U 7EU

Solicitors

Fieldfisher LLP
Riverbank House
2 Swan Lane
London EC4R 3TT

BPE Solicitors LLP
St James' House
St James' Square
Cheltenham
Gloucestershire GL50 3PR

NOMAD/Broker

finnCap
One Bartholomew Close
London
EC1A 7BL

Registrar

Link Group
10th Floor
Central Square
29 Wellington Street
Leeds
LS1 4DL

Patent Agent

Grossman, Tucker, Perreault & Pfleger, LLP
55 South Commercial Street
Suite B14
Manchester, NH, USA
03101

Bankers

HSBC plc
Vista
St David's Park
Ewloe

Registered Office

Fieldfisher LLP
Riverbank House
2 Swan Lane
London EC4R 3TT

US Operations

2 Marin Way
Unit 1
Stratham, NH, USA
03885