



ALEXIUM

ALEXIUM INTERNATIONAL GROUP LIMITED
ANNUAL REPORT
For the Year Ended 30 June 2023

ABN 91 064 820 408

PRESENTED IN US DOLLARS

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DIRECTORS

Mrs Rosheen Garnon
Brigadier General Stephen Cheney, USMC (Ret)
Mr Simon Moore
Dr Paul Stenson
Dr Robert Brookins
Mr Carl Dennis
Mr William Blackburn

COMPANY SECRETARY

Mark Licciardo

REGISTERED OFFICE

Acclime Corporate Services Australia Pty Ltd
Level 7, 330 Collins Street
Melbourne VIC 3000
Telephone: +61 8 9384 3160

AUDITORS

Grant Thornton Audit Pty Ltd
Level 17
383 Kent Street
Sydney NSW 2000

SHARE REGISTRY

Automatic Registry Services
Level 5, 126 Phillip St
Sydney NSW 2000
Telephone: 1300 288 664

BANKERS

Macquarie Bank
Level 23, 235 St Georges Terrace
Perth WA 6000

SOLICITORS

Steinepreis Paganin
Level 4, The Read Buildings
16 Milligan Street
Perth WA 6000

ABN

91 064 820 408

DOMICILE AND COUNTRY OF INCORPORATION

Australia

LEGAL FORM OF ENTITY

Listed Public Company

SECURITY EXCHANGE

Australian Securities Exchange Limited
Home Exchange: Sydney
ASX Code: AJX

Dear Shareholders,

The Company closed FY23 with strong momentum after a year of significant transition. At the start of FY23, Alexium sales were highly concentrated in the bedding markets with PCM making up the largest share of the revenue. That concentration paired with a slow US bedding market, resulted in a miss on forecasted revenue in FY23. Soft consumer confidence drove low retail sales in the bedding market. This was a continuation from H2 of FY22.

The company went through a transition to restructure the executive team to add a commercially oriented CEO, a revised strategy, and the launch of additional technologies to diversify and grow our revenue. That said, Alexium was successful in retaining key customers and expects increased sales volumes to return, commensurate with a bedding market recovery. Those key customer relationships will also form the foundational basis from which the forthcoming growth from additional product lines and new markets outside of bedding can be realised. Management maintained gross margin at 39% while improving inventory management, making just-in-time purchases and production runs to extend cash reserves.

Key milestones for FY23 performance and activities that position the Company well for FY24 and beyond:

- Closed a convertible note with Colinton Capital Partners. This paired with the Alterna lending closed in FY22 allows for a healthy cash position going forward.
- With the addition of Mr Blackburn as Chief Executive Officer, the company underwent a management team restructuring which shifted the company's focus from developing technology to commercialising existing technologies for growth. The technical team refocused its efforts from R&D to product adoption with customers.
- Continued market penetration of BioCool® products in the bedding market, growing sales of an environmentally sustainable cooling technology.
- Improvements to Alexium's PCM chemistry created new opportunities for foam applications, which will both diversify and grow revenue.
- Improved the Eclipsys® technology to better position it for successful adoption in the tactical gear (body armour) market.
- Commercialised the new DelCool™ heat index reduction technology, which went live with a new pillow placement in retail stores in Q4 FY23. DelCool™ production improvements are underway, which will open new opportunities for higher volume placements due to its exceptional cost-to-benefit ratio.
- Further improved the FR NyCo fabric to drive an increased chance of full-scale adoption within US military branches. Bolstered the FR NyCo supply chain by adding proven collaborative manufacturers within the US Military space to ready the business for commercialising military supply. Quoted three FR NyCo fabric options for the US Marine Corps, which is still pending feedback. Development and testing efforts continue with the US Army.
- With the business pipeline full of qualified growth opportunities, the company now shifts focus to bolstering the supply chain and readying for increased production.

These milestones are indicative of the change in approach at Alexium. The team consists of a well-aligned group of highly capable contributors focused on meaningful results for all Alexium stakeholders. The transitions underwent in FY23 paved the way for a year of execution in FY24. Alexium has a well-articulated strategy and plan to execute to position the business for success for years to come.

Thank you to all our shareholders for your support throughout the year. We look forward to seeing you at our AGM.

Sincerely,



Mrs Rosheen Garnon
Chair of the Board



Mr William Blackburn
Chief Executive Officer

The Directors present their report on Alexium International Group Limited and its subsidiaries ('Company' or 'Group') for the period ended 30 June 2023.

DIRECTORS

The Directors of the Company in office during the period and until the date of this report are set out below. Directors were in office for the entire period unless otherwise stated.

- Mrs Rosheen Garnon
- Brigadier General Stephen Cheney, USMC (Ret)
- Dr Robert Brookins
- Mr Simon Moore
- Dr Paul Stenson
- Mr Carl Dennis
- Mr William Blackburn (appointed 01 Sep 2022)

RESULTS AND REVIEW OF OPERATIONS

PRINCIPAL ACTIVITIES

The principal activity of the Company during the financial year was the development of high-performance materials where there is a market opportunity for commercialisation. During the period, activities included:

- Research and development in consultation with end customers;
- Obtaining patents in relation to new products developed; and
- Manufacturing, sales, and distribution of the products.

DIVIDENDS

No dividend was paid during the period and the Board has not recommended the payment of a dividend (2022: Nil).

SHARE CAPITAL

The following were on issue:

	30-Jun-23	30-Jun-22
Ordinary shares	651,389,760	645,256,590
Outstanding warrants	-	3,829,787
Share appreciation rights	67,274,436	32,910,779
Performance rights	-	270,482

OPERATING AND FINANCIAL REVIEW

Operations and Technology Review

The Company's corporate and operating activities are performed from our single facility located in Greer, South Carolina, USA. The Company utilises contract manufacturers to produce finished goods; this creates a variable cost model for manufacturing and allows the Company to focus its efforts on product development and commercialisation of high-performance products. The main product families are phase change material ("PCM") and cooling products for bedding, flame-retardant ("FR") technologies for markets such as bedding, military, and workwear and thermal management materials (using heat dissipation and/or moisture management products) for bedding, and body armour.

Billy Blackburn was appointed CEO & Managing Director of Alexium, effective 1 September 2022. In this transition, Dr. Bob Brookins was appointed Chief Technology Officer (CTO) and remains an executive director on the Board. The Board is pleased with the impact these appointments have had on the Company's sales pipeline. Specific highlights include:

- The company successfully commercialised the new DelCool™ technology with a customer adopting it in a pillow sold at a large retail department store. The initial successful launch of DelCool™ in pillows led to current product evaluations by online and television shopping channels, and large low-cost retailers.
- Advancements in Alexium's PCM technology opened opportunities for foam mattress and pillow applications. This led to new commitments from foam customers for adoption and new sales in FY24.
- Though delayed, the large bedding brand adoption of Eclipsys® in mattresses continues to move forward. Plans for that process and timeline were developed in H2 of FY23 with sales to commence in H2 of FY24.

- Testing and development efforts for a bedding technology platform commenced in H2 of FY23. This was formerly referenced as “Total Mattress Cooling System” (TCMS), which is a combination of Alexium’s PCM, DelCool™ and Eclipsys® technologies as a platform for best-in-class cooling and comfort in mattress builds. There are now two active customer product development initiatives underway. Both could lead to meaningful new revenues in late FY24, early FY25.
- Based on operating activities, the company was cash positive for Q4 FY23.

During Q3, we rolled out the revised strategy with key focus areas for both business and product development. A recap of that focus is below:

Business & Product Development – FY23 & FY24 Focused Priorities

Core Focus Areas (70%):

PCM, DelCool® & Eclipsys applications:

- Innerspring Mattress
- Foam Mattress
- Low-cost/HiVolume Mattress Applications (“bed in a box”)
- Top of Bed- Pillows and Mattress Toppers

Adjacent Focus Areas (20%):

Alexiflam® & Alexigaurd applications:

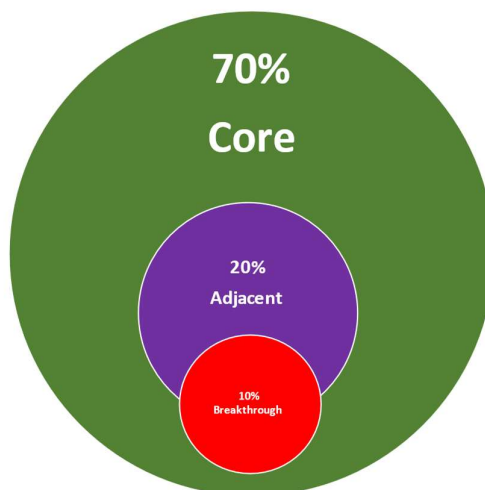
- FR NyCo – US Army
- FR NyCo – US Marine Corp
- Mattress

Eclipsys applications:

- Body Armor/Tactical Vests

Breakthrough Focus Areas (10%):

- Eclipsys for Helmets (military, law enforcement, sports)
- Eclipsys for Footwear
- Eclipsys for Electronics
- Eclipsys and/or PCM for Cold Chain Packaging
- Alexiflam sold as a textile softener
- Alexiflam for workwear and/or PPE



Alexicool®: Phase Change Material (PCM) cooling products for textile and foam applications. This product line is the Company’s original PCM, and still serves as a work horse product in many bedding applications. Its cooling performance is best in class, reliable, and easily applied to customers’ end products. Most importantly, Alexicool® creates significant value for customers through differentiation allowing for higher pricing.

BioCool®: Proprietary biobased PCM used as a cooling product for textile and foam applications. It is a sustainable product line with a USDA BioPreferred Certification. Throughout FY23, BioCool® continued seeing strong adoption by customers and surpassed Alexicool® as the Company’s best-selling PCM.

Eclipsys®: Perpetual cooling technology for textile and foam-based products. This IP protected technology is a lightweight product that has benefits of being adaptive/responsive, cooling, non-flammable, and environmentally friendly. In contrast to PCM technology, which works by absorbing heat, this technology counteracts the insulative effects of foam and textiles, constantly moving heat away from the body.

Eclipsys® for bedding - adoption by a major bedding brand is on track to commercialise in early FY24. The Company expects initial production rates in Q2 FY24 with launch in Q3.

Eclipsys® for tactical gear – the initial launch in 2022 has led to product improvements and renewed interest and testing from multiple target customers. In Q4 FY23, one customer began production of vests with Eclipsys® with the initial sales volumes of the vests for retail customers, mostly in e-commerce. We are currently working with that customer on large-scale international military and federal police tactical vest placements.

DelCool™ - Alexium’s newest commercial technology is positioned for significant growth in the Company’s core focus area of bedding. The technology is based on a proprietary composite fabric that is sold either as a rolled good or as a cut-and-sewn product. This product offers best-in-class cooling from heat index reduction via microclimate regulation. The Company had its first full-rate production run and sales in Q4 FY23. Alexium is currently working on four active product development projects with four major bedding brands. The projects are for three mattress brand builds and an additional pillow placement for a large national retail chain.

Alexiflam® for Military Uniforms: Application of this product to military uniforms helps to protect a broader number of military personnel not just those in high-risk scenarios. The Company has recently been working directly with the US Army and the US Marines to provide rolls of treated fabric for evaluation and limited use trials. Both branches have shown strong interest in a cost-effective FR treated nylon-cotton blended fabric that is both breathable and tear-resistant. The company submitted three fabric samples with accompanying pricing to a US Marine Corps request for quote in Q4 FY23.

Financing: In FY22, the Company entered an asset-based line of credit with Alterna Capital Solutions to provide working capital funding to support the Company’s growth. The facility is a three-year \$3.0M asset-based line of credit which can be increased to \$5.0M with the approval of Alterna

Capital Solutions as needed. This line will support the Company's growth initiatives for commercialisation of thermal management and flame-retardant products in new end-product markets. The interest rate is adjustable with a fixed base of 5.0% plus the US prime lending rate published in the Wall Street Journal which at the end of July 2023 was 8.5% for a total annual rate of 13.5%. The borrowing base of the line of credit consists of 90% of eligible accounts receivable plus a calculated portion of inventory which, among other factors, will not exceed 50% of eligible inventory.

The Company further strengthened its cash position by amending its existing convertible note with an existing shareholder in December 2022. The original note was due to expire on 24 December 2023 and carried a face value of \$3.5M (A\$5.1M). In conjunction with this amendment, the shareholder agreed to provide an additional \$1.0M (A\$1.5M) to support the business through the next phase of its growth and development. The restated note has a face value of \$4.8M (A\$7.0M), a three-year term and a base annual interest rate of 10%. See additional details in the Notes to the Consolidated Financial Statements.

Skilled Labour: US unemployment remained very low throughout the year. The skills needed for positions within the Company are typically related to the sciences and administrative functions. The company did not have any issues filling vacancies throughout the year.

Environmental, Social and Governance (ESG)

Alexium is committed to providing innovative, sustainable, and environmentally friendly solutions to our customers and end consumers. We take responsibility for our impact on the environment and human welfare seriously and are dedicated to exceeding industry standards for safety and environmental sustainability. The board recognises the importance of formally integrating Environmental, Social and Governance (ESG) principles into our daily operations and as such, is committed to implementing a transparent, data driven program to help identify opportunities to align our business activities with these values. Both the Australian Treasury and AASB have proposed mandatory climate-related disclosures that will affect all companies that are required to prepare annual reporting under the Corporations Act 2001. While the requirements have not yet been implemented, the adoption is highly probable. Alexium will continue to follow the development of these regulations and the impact on the Company. As we move forward, we will issue policy statements and establish comprehensive reporting to ensure compliance with ESG standards and reporting disclosures.

Another important component of Alexium's ESG strategy is to help our customers meet their own ESG goals. Our Biocool® mPCM product meets the USDA's criteria for biobased products and is registered in the USDA BioPreferred program with 94% biobased content.

Financial Result Overview

The Company's net loss attributable to members of the Company for the financial year was \$2,950,943 (2022: \$3,360,271). This represents a 12.2% decrease in net loss over the prior period. If the prior year net loss was adjusted for the intangible impairment of \$1,026,377, the normalised net loss would have been \$2,333,894 resulting in a year over year increase in net loss of \$617,049 which is due primarily to a year-over-year decrease in sales offset in part by a reduction in operating expenses.

Revenues from ordinary operating activities decreased 11.8% from the prior year at \$7,210,574 (2022: \$8,174,937). Revenue continues to be impacted by a decline in the US retail market conditions which have negatively impacted the bedding market sales as consumer confidence weakened amid ongoing inflation concerns.

Gross profit decreased 15.3% year over year at \$2,821,601 (2022: \$3,329,715) while the gross margin percentage decreased by 1.6 percentage points to 39.1% (2022: 40.7%). This decrease is attributable to unfavourable customer/product mix as well as customer delays in launch of new products.

Operating expenses decreased 24.0% at \$5,019,684 (2022: \$6,604,186). The net change of \$1,584,502 was mainly due to a prior-year impairment of \$1,026,377 for two intangible assets related to the flame-retardant product line. The Company continues to remain positive with respect to the business potential of the flame-retardant product line based on customers' engagement and market analysis. Refer to Note 12 of the financial statements for further details. Without the impairment expense in the prior year, normalised Operating Expenses would have been \$5,577,810 resulting in a decrease in the current year of \$558,126 or 10.0% driven principally by cost-cutting measures including reduction in personnel and consultancy spend.

Interest expense at \$983,155 (2022: \$776,042) reflects an increase of \$207,113 or 26.7% due to the rise in interest rates as well as an increased level of debt from the amendment of the convertible note. There was a gain on the embedded derivative related to the convertible note of \$794,098 (2022: \$688,060) primarily due to revaluation. Refer to Note 16 of the financial statements for further details. There was also a loss on debt extinguishment related to the amendment and restatement of the convertible notes in the amount of \$576,374 (2022: nil).

As at the reporting date, the cash position was \$513,277 (2022: \$1,027,095). Cash changes were primarily from normal operating and investing activities along with a cash inflow of \$1.0M as part of the amendment and restatement of the convertible note.

Material Business Risks

The Company has identified below the specific risks which could impact upon its prospects:

Maintaining strong intellectual property position: Product innovation is key to the Company's business model. Thus, maintaining a strong intellectual property position is critical. To ensure this, the Company is attentive to developing next-generation products that are not only well-differentiated in the market but are also inventive and market responsive. The Company recognises that it must not only develop these products but protect the technology underlying them through a sophisticated patent registration program. The management team predominantly focuses on patent protection to safeguard the Company's intellectual property. Therefore, patent applications are filed for each technology platform covering the key parts of the composition as well as product applications. To ensure adequate protection provided by these, market analyses are performed to ensure

protection is afforded in the relevant regions for the applicable markets.

Competition in key markets: The Company has worked diligently on its products to ensure that market competition is well understood, and that the Company's product portfolio adequately responds to these competitors. This response includes:

- Effective pricing strategies with regular pricing meetings to review costs and margins;
- Product innovation;
- Analytical tools and methods that objectively demonstrate the value of the Company's products versus those of competitors; and
- Identification of market gaps where current commercial technologies are not effective.

Sufficient capital for achieving profitability: On a monthly basis, Management monitors and creates various forecast scenarios to ensure there is sufficient capital to achieve profitability and communicates these results to the board. The board is confident that the Company's revenue forecasts, commercial pipeline, and funding options will provide the Company with sufficient working capital for the upcoming twelve months. However, in the unlikely event that sales do not materialise as projected, the Company is evaluating strategies to obtain the required additional funding for future operations. These strategies may include, but are not limited to, obtaining equity financing, issuing debt, or entering other financing arrangements, and restructuring of operations to grow revenues and decrease expenses.

Commercial risks due to market dynamics: Beyond threats from competitors, the Company identifies changes in the markets themselves as potential risks and works to mitigate these risks through diversification of its product portfolio, customer-driven product innovation, and the expansion of its customer base.

Rising Interest Rates: The US Federal Reserve raised interest rates seven times in FY23 for a total change of 350 basis points. The Company is impacted by these types of rate hikes on the interest it pays for the line of credit agreement. Based on forecasted cash flow models this will not create a significant impact to the company in the foreseeable future. The Company also closely monitors receivables to ensure expected payments are being made timely to minimise the need to borrow funds.

Inflation: US inflation was at its highest level since 1981 at the end of FY22 and through the first half of FY23. This could cause consumer spending to decrease on discretionary spending for items such as mattresses. Conversely, we see resilience in the top-of-bed segment of the bedding market due to the lower price points of these products versus mattresses. Inflation rates decreased in the second half of FY23, but consumer confidence has not yet rebounded.

Likely Developments

The Company is committed to:

- Continued market expansion of the USDA BioPreferred certified BioCool® product line;
- Continued market expansion of the DelCool™ technology in bedding, especially focused on lower-priced, higher-volume product placements;
- Continued work with the US Army and US Marines to qualify FR NyCo technology for military uniforms. The Company is currently awaiting a decision by the US Marines in response to a Request for Quote (RFQ) submitted June 2023 for sales which would commence in FY25; and
- Commercialisation of the Eclipsys® product line in bedding and body armour.

The Company's business strategies to achieve the above goals include:

- Leveraging market position and Company resources for greater market penetration,
- Strengthening and maintaining key relationships supporting the Company's initiatives, and
- Maintaining a disciplined and conservative approach to managing resource allocations and expenditures relative to sales growth.
- Ensuring a financially strong and stable business through detailed planning, responsible management and transparency of strategy and outcomes.

Events since the end of the financial period

There has not arisen any item, transaction, or event of a material and unusual nature, which in the opinion of the Directors of the Company, is likely to significantly affect the operations of the Company, the results of those operations, or the state of affairs of the Company in future financial years.

Environmental Reporting

The Company's operations are currently located solely in the United States, and as such are not regulated by any significant environmental regulation under a law of the Commonwealth or of a State or Territory in Australia.

US Laws concerning the environment that affect or could affect our operations include, among others, the Clean Water Act, the Resource Conservation and Recovery Act, the Occupational Safety and Health Act, the National Environmental Policy Act, the Toxic Substances Control Act, regulations promulgated under these Acts, and other federal, state, and local laws or regulations governing environmental matters. We believe that the Company complies with these laws and that future compliance will not materially affect our earnings or competitive position.

The BioCool® product line has a USDA BioPreferred Certification based on its biobased content which has a positive impact to the environmental standing of our customers whenever they choose to use the Company's products as part of their ultimate products. Additionally, the Company's vendors are selected in part based on their adherence to established environmental standards as well as compliance with manufacturing standards such as ISO 9001.

For the reporting period, the board is not aware of any breach of applicable environmental regulations by the Company.

Corporate Governance Statement

The documents that govern the Company's corporate governance framework, including its Constitution, charters and policies are available in the Corporate Governance section on the Company's website - www.alexiuminternational.com/about/#corpGov

Information on Directors

The names of the Directors holding office during the period are set out below, together with details of their experience, qualifications, special responsibilities, and other company directorships during the past three financial years.

Mrs Rosheen Garnon

BEC (Accounting major), LLB, FCA, CTA, GAICD. Appointed as an independent Non-Executive Director from September 2018; Chair from March 2019.

Skills and Experience: Mrs Garnon is a non-executive director with experience in infrastructure and transport, financial services, and material sciences. She has had a distinguished career in the accounting profession as a chartered accountant and taxation advisor. She was a senior partner with KPMG and held senior executive leadership roles with the firm in Australia and at a global level. She has extensive experience working with Boards and C Suite executives.

Current External Appointments:

Non-Executive Director of Australian Rail Track Corporation since November 2018, Non-Executive Director for Resolution Life Australia since November 2019, Non-Executive Director for Retirement Benefit Fund Pty Limited from November 2021, and Chair of the Board of Taxation, an independent advisory board that advises the Federal Treasurer and the Assistant Treasurer on Australia's taxation system since March 2020. Mrs Garnon's not for profit and volunteer roles include Non-Executive Director for The Smith Family since February 2019, Deputy Chair of the Australia Council for the Arts from August 2021, Non-Executive Director for Venues NSW since March 2021, and Non-Executive Director for Women Corporate Directors since 2012.

Brigadier General Stephen Cheney

BS, MS. Appointed as an independent Non-Executive Director of the Company since April 2015. BG Cheney is a member of the Audit, Nomination and Remuneration, and Risk Committees.

Skills and Experience: BG Cheney is the former Inspector General of the Marine Corps and Commanding General of Parris Island Marine Base. He is also the former Deputy Executive Secretary to US Defence Secretary Dick Cheney under President George H.W. Bush. General Cheney was a member of Secretary of State John Kerry's Foreign Affairs Policy Board and is the President Emeritus of the Washington D.C. based 501(c)(3) policy group American Security Project as well as President of their 501(c)(4) company The American Security Action Fund.

Current External Appointments: Appointed President Emeritus of the American Security Project in April 2022 and remains a board member there. Appointed member of the Advisory Board of Workstorm, LLC in June 2022.

Mr Simon Moore

BCom, LLB. Appointed as an independent Non-Executive Director January 2020 and is currently Chair of the Audit Committee and a member of the Nomination and Remuneration and Risk Committees.

Skills and Experience: Mr Moore is the Senior Partner of the investment firm, Colinton Capital Partners. Prior to establishing Colinton Capital Partners in 2017, Mr Moore was a Global Partner of The Carlyle Group having established their operation in Australia in 2005. In his time at The Carlyle Group, he oversaw the Firm's investments in and served on the Boards of Directors of Coates Hire, Healthscope and Qube.

Current External Appointments: Deputy Chair for AMA Group since November 2018 and Non-Executive Director of Palla Pharma Limited from July 2016 to December 2021.

Dr Paul H. Stenson

BSc, PhD. Appointed as an independent Non-Executive Director June 2020. Dr Stenson is the chair of the Risk Committee and a member of the Audit Committee.

Skills and Experience: Dr Stenson has a distinguished career with the research, development, manufacture, and commercialisation of new materials in the fields of coatings, adhesives, nonwovens, and pharmaceuticals.

Dr Stenson has been President and CEO of StanChem Inc. since January 2018. StanChem Inc. comprises two companies – StanChem Polymers which is a manufacturer of water-based polymers for the coatings and adhesives industries, and Albi Protective Coatings which focuses on the specialty sector of fire protective intumescent paints and specialty high performance industrial coatings.

Prior to joining StanChem in 2017, Dr Stenson worked as a global technology director at Axalta Coating Systems. Between 2011 and 2016, Dr Stenson was the executive vice president of technology and product development at Ahlstrom for nonwoven and specialty high performance paper products. Prior to joining Ahlstrom, Dr Stenson was the vice president of technology for industrial and packaging coatings at Valspar based in Minneapolis and Zurich, Switzerland from 1993 until 2011. Dr Stenson is also the chairman of TopChem Pharmaceuticals (Ireland) which is a manufacturer of active pharmaceutical ingredients.

Current External Appointments: Director for TopChem Pharmaceuticals (Ireland) Limited since January 2005, and a Director for Deltech (StanChem) Holdings, LLC since July 2017.

Mr Carl Dennis

BCom. Appointed as an independent Non-Executive Director from September 2021 and is currently Chair of the Nomination and Remuneration Committee.

Skills and Experience: Mr Dennis is an operational management professional with over 25 years of experience with expertise in Consumer and Pharmaceutical Goods. As a former CEO and commercial director, Mr Dennis has deep skills in new product development, sales and marketing, international brand management and operational execution. Mr Dennis was the CEO and co-owner of Vital Merchandising Services Pty Ltd for 11 years which was acquired by Imperial Logistics Limited in 2007 and he went on to hold both operational and business development C-suite roles with Imperial Logistics as part of the DP World Group. Throughout his career, his clients have included Blue Chip FMCG organisations with globally recognised brands. Over the past seven years Mr Dennis has focused on creating new markets for international Australian consumer brands across Asia, the Middle East, and Africa.

Current External Appointments: None.

Mr William Blackburn

Appointed as Chief Executive Officer and Managing Director in September 2022.

Skills and Experience: Mr Blackburn has over 25-years of experience in general management, with a track record of driving commercial growth. He has enjoyed success as both an entrepreneur and as an executive in larger organisations. He founded Emes, LLC, a technology-based specialty chemical business. Emes had a unique business model focused on high-purity chemical production paired with recycling in the pharmaceutical and consumer healthcare markets. Mr. Blackburn sold the business to Nova Molecular. He joined their executive team to lead further commercial growth of the merged organisations. More recently, Mr. Blackburn has been the Vice President of Giant Cement Holdings Inc., and executive manager of its subsidiary, Giant Resource Recovery (GRR), where he led a significant turn-around of the business resulting in 70% EBITDA growth over two-years. He also raised significant capital for the GRR business to modernise its plants for sustained profitable growth.

Since joining Alexium, Mr. Blackburn has been leading the company's efforts to commercialise its significant intellectual property. He is very active in daily sales management, marketing and in building a robust supply chain to support significant sales growth. Mr. Blackburn is a team builder focused on retaining and acquiring talent, and ensuring people are in the right position to support the company's strategic growth plans.

Current External Appointments: None.

Dr Robert Brookins

PhD, M.A.E. BA, BSc. Served as Chief Executive Officer and Managing Director from July 2018 to August 2022 and currently serves as Chief Technology Officer.

Skills and Experience: Dr Brookins has more than 15 years of experience in organic synthesis and materials chemistry. He received his PhD from the University of Florida in the areas of synthesis and characterisation of conjugated polyelectrolytes and polymers with an emphasis on developing new polymerisation methods. Upon completion of his PhD, he worked at the US Air Force Research Laboratory at Tyndall AFB, FL where he developed decontamination methods for chemical and biological threats and developed novel synthetic routes for reactive and functional surfaces. In 2010, Dr Brookins joined Alexium where he and his team pioneered new classes of flame-retardants for key textile markets. Additionally, his research focuses on phase change materials, particularly novel application methods and analytical tools.

Dr Brookins has been instrumental in the research and development of the Company's innovative technologies. Dr Brookins led the development and commercialisation of Alexium's phase change material (PCM) platform technologies and the Alexicool® product line, which is the foundation of the Company's success in the bedding and top-of-bed markets.

Dr Brookins has, during his time with the Company, been involved in multiple facets of the business, including working with customers on product design and marketing, analysing markets to assess opportunities, and planning for logistics and supply-chain management. In addition, Dr Brookins co-invented Alexium's flame-retardant (FR) technologies for military uniforms and formaldehyde-free, flame-retardant products for cotton-based materials.

Current External Appointments: None.

Company Secretary

Mr Mark Licciardo founded Mertons Corporate Services in 2007. Mertons is now part of Acclime Australia where Mark is responsible for Acclime Australia's Listed Services Division. Mr Licciardo was appointed as Company Secretary effective 01 March 2020. Mr Licciardo is an ASX-experienced director and chair of public and private companies, with expertise in the listed investment, infrastructure, biotechnology, and digital sectors. He currently serves as a director on several Australian company boards as well as foreign-controlled entities and private companies.

Meetings of Directors

Directors' attendance at scheduled board and committee meetings during the reporting period:

Directors	Board	Audit	Risk	Remuneration & Nomination
Mrs Garnon	13/15	-	4/4	6/6
Mr Cheney	14/15	4/4	3/4	5/6
Mr Moore	15/15	4/4	4/4	6/6
Dr Stenson	13/15	2/4	4/4	-
Mr Dennis	12/15	2/2	-	6/6
Dr Brookins	13/15	-	-	-
Mr Blackburn	12/12	-	-	-

In addition to the above, the board and committees meet regularly on an informal basis.

The information provided in this Remuneration Report has been audited as required under section 308(3C) of the Corporations Act (Cth).

A. Key Management Personnel ('KMP')

For the purposes of this report, personnel deemed KMP at any time during the reporting period are:

Name	Position	Appointed	Resigned
Mrs Rosheen Garnon	Non-Executive Chair	-	-
BG Stephen Cheney	Non-Executive Director	-	-
Mr Simon Moore	Non-Executive Director	-	-
Dr Paul Stenson	Non-Executive Director	-	-
Mr Carl Dennis	Non-Executive Director	-	-
Mr William Blackburn	Chief Executive Officer	September 2022	-
Dr Robert Brookins	Chief Technology Officer	-	-
Mr Jason Lewis	Chief Financial Officer	-	-

B. Remuneration Policy

The objective of the Company's remuneration framework is to ensure reward for performance is competitive, appropriate for the stage of development of the Company, results are delivered and to attract and retain suitably qualified and experienced candidates. The Remuneration and Nomination Committee continuously monitors the remuneration framework with a goal of ensuring that remuneration is aligned with performance and the shareholder value creation. The Company's remuneration framework aims to ensure that:

- Rewards reflect the competitive global market in which the Company operates;
- Incentive remuneration is linked to KPI's, which are designed to encourage behaviours that are short, medium and long term in nature;
- Rewards to executives are linked to shareholder value creation;
- Executives are rewarded for both financial and non-financial performance; and
- Remuneration arrangements ensure equity between executives and facilitate the deployment of human resources.

The Board utilises published market data and independent consultation as needed in developing and updating its remuneration policies and practices. In accordance with best practice corporate governance, the structure of Non-Executive and Executive remuneration is separate and distinct. Remuneration Committee responsibilities are carried out by Mr Dennis (Chair), Brigadier General Cheney, Mr Moore, and Mrs Garnon.

Non-Executive Director Remuneration Policy

Fees and payments to the Non-Executive Directors reflect the demands and the responsibilities of the Directors. Fees and payments are reviewed by the Remuneration Committee to ensure they are appropriate and in line with the market. Non-Executive Directors receive a fixed fee for service. Individual director's fees are determined within an aggregate directors' fee pool limit, which is periodically recommended for approval by shareholders. The maximum aggregate annual fees are \$375,000 as approved at the 2016 AGM. No retirement benefits are provided other than compulsory where applicable.

Executive Remuneration Policy

The Company's Managing Director's and Executives' remuneration packages contain the following key elements:

- Primary benefits – base salary, short-term incentives, post-employment contributions and medical benefit plan for US based executives.
- Long term incentives – Share appreciation rights under the Company's Share Appreciation Rights Share Plan.

External remuneration information provides benchmark information to ensure remuneration is set to reflect the market for a comparable role. Base fees are reviewed annually to ensure the level is competitive with the market. There is no guaranteed salary increase included.

C. Consequence on Shareholder Wealth

In considering the performance of the Company and the benefits for shareholder wealth, the Remuneration Committee has considered a range of indicators in respect to senior executive remuneration and has linked these to the previously described short- and long-term incentives.

The following table presents these indicators over the past five financial years:

	2023	2022	2021	2020	2019
Net profit/ (loss)	(2,950,943)	(3,360,271)	(1,445,319)	(6,125,476)	(6,939,521)
Dividends declared	Nil	Nil	Nil	Nil	Nil
Share price as at 30 June (A\$)	0.013	0.024	0.049	0.060	0.155
EPS (cents)	(0.46)	(0.52)	(0.23)	(1.26)	(2.01)

D. Details of Remuneration

	Short-term benefits			Share-based payments			Other Benefits		
	Salary and fees	Non-monetary benefits	Short-term incentives ⁽¹⁾	Performance rights ⁽²⁾	Share appreciation rights ⁽³⁾	Shares in lieu of salary ⁽⁴⁾	Post-employment benefits	Total	Performance based % of Total
2023									
Non-Executive Directors									
Mrs Garnon	-	-	-	-	-	89,500	10,500	100,000	-
BGen Cheney	60,000	-	-	-	-	-	-	60,000	-
Mr Moore	-	-	-	-	-	70,000	-	70,000	-
Dr Stenson	65,000	-	-	-	-	-	-	65,000	-
Mr Dennis	61,750	-	-	-	-	2,250	-	64,000	-
Total Non-Executive Directors	186,750	-	-	-	-	161,750	10,500	359,000	
Executive Directors									
Mr Blackburn - CEO & MD ⁽⁵⁾	270,625	23,526	-	-	20,293	-	8,900	323,344	6.3%
Dr Brookins - CTO	315,000	15,692	-	-	68,433	-	2,688	401,813	17.0%
Total Executive Directors	585,625	39,218	-	-	88,726	-	11,588	725,157	
Executive									
Mr Lewis - CFO	265,000	15,716	30,000	-	57,571	-	11,862	380,149	23.0%
Total Executive	265,000	15,716	30,000	-	57,571	-	11,862	380,149	
Total	1,037,375	54,934	30,000	-	146,297	161,750	33,950	1,464,306	

(1) Short-term incentive plan ("STI") is paid in cash for the achievement of a range of financial and non-financial performance criteria based on corporate objectives:

- Financial – revenue growth, gross margin and EBITDA;
- Non-Financial – numerous and distinct key performance goals approved by the board each having its own weight of the total bonus targets
- FY 23 STIs forfeited due to not meeting performance criteria are:
 - Mr Blackburn – 100%
 - Dr Brookins – 100%
 - Mr Lewis – 100% (Mr Lewis received a \$30,000 retention bonus within the fiscal year)

(2) Long term incentive plans ("LTI") are provided with the objectives to:

- provide an incentive and to reward, retain and motivate participants
- recognise the abilities, efforts, and contributions of participants to the performance and success of the Group; and
- provide participants with the opportunity to acquire or increase their ownership interest in the Group

(3) See *F. Share Based Compensation* section for detail on long-term incentives. Issuance of shares will occur only when all vesting conditions are met.

(4) Shares in lieu of salary to directors were approved by shareholders at the 2022 AGM. There are no performance conditions related to these shares.

(5) Represents remuneration from 1 September 2022 to 30 June 2023

	Short-term benefits			Share-based payments			Other Benefits		
	Salary and fees	Non-monetary benefits	Short-term incentives ⁽¹⁾	Performance rights ⁽²⁾	Share appreciation rights ⁽³⁾	Shares in lieu of salary ⁽⁴⁾	Post-employment benefits	Total	Performance based % of Total
2022									
Non-Executive Directors									
Mrs Garnon	90,951	-	-	-	-	-	9,088	100,039	-
BGen Cheney	65,000	-	-	-	-	-	-	65,000	-
Mr Moore	70,024	-	-	-	-	-	-	70,024	-
Dr Stenson	70,000	-	-	-	-	-	-	70,000	-
Mr Dennis	33,750	-	-	-	-	11,250	-	45,000	-
Total Non-Executive Directors	329,725	-	-	-	-	11,250	9,088	350,063	
Executive Directors									
Dr Brookins - CTO & ED	315,000	13,666	-	4,682	128,625	-	-	461,973	28.9%
Total Executive Directors	315,000	13,666	-	4,682	128,625	-	-	461,973	
Executives									
Mr Lewis - CFO	265,000	13,666	-	3,151	108,208	-	-	390,025	28.6%
Total Executives	265,000	13,666	-	3,151	108,208	-	-	390,025	
Total	909,725	27,332	-	7,833	236,833	11,250	9,088	1,202,061	

(1) Short-term incentive plan ("STI") is paid in cash for the achievement of a range of financial and non-financial performance criteria based on corporate objectives:

- Financial – revenue growth and EBITDA;
- Non-Financial – numerous and distinct key performance goals approved by the board each having its own weight of the total bonus targets.
- FY 22 STIs forfeited due to not meeting performance criteria are:
 - Dr Brookins – 100%
 - Mr Lewis – 100%

(2) Long term incentive plans ("LTI") are provided with the objectives to:

- provide an incentive and to reward, retain and motivate participants.
- recognise the abilities, efforts, and contributions of participants to the performance and success of the Group; and
- provide participants with the opportunity to acquire or increase their ownership interest in the Group.

(3) See *F. Share Based Compensation* section for detail on long-term incentives. Issuance of shares will occur only when all vesting conditions are met.

(4) Shares in lieu of salary to directors were approved by shareholder at the 2021 AGM. There are no performance conditions related to these shares. In addition to the expense amounts shown above in the amount of \$11,250, there is a prepayment of \$2,250 for shares issued in advance and held in escrow for Mr. Dennis.

E. Service Agreements

On appointment, the Non-Executive Directors enter into an agreement with the Company in the form of a letter of appointment. The letter outlines the Board's policies and terms, including remuneration relevant to the office of director. Non-Executive directors are compensated for their contributions to the board and any committees they lead or serve. These agreements can be terminated without cause by either party at any time.

The Company has entered into service agreements with executives, which contain standard terms and conditions for agreements of this nature, including confidentiality, restraint on competition and intellectual property provisions. These agreements may be terminated with 90 days' notice by either party, or earlier in the event of certain terms and conditions breaches. The Company may at its sole discretion terminate the employment without cause by giving 90 days' written notice or making a payment of 90 days' salary in lieu of notice. Remuneration is reviewed annually and approved by the Board of Directors and includes potential short-term and long-term incentive opportunities as well as salary and other benefits.

F. Share-based Compensation

Performance Rights

The performance rights plan was replaced with the share appreciation rights plan in FY21. The final vesting of performance rights occurred in FY22, and the related shares were issued in FY23.

The valuation of performance rights granted and vested to KMP is detailed below:

	2023			2022		
	Granted (\$)	Vested (\$)	Forfeited (\$)	Granted (\$)	Vested (\$)	Forfeited (\$)
Executive Director						
Dr Brookins - CTO	-	-	-	-	4,682	-
Executive						
Mr Lewis - CFO	-	-	-	-	3,151	-
Total	-	-	-	-	7,833	-

The number of performance rights held during the reporting periods to KMP including their personally related parties is set out below:

	Balance at start of year	Granted	Vested & issued	Forfeited	Balance at end of year	Vested - not issued
2023						
Executive Director						
Dr Brookins - CTO	139,552	-	(139,552)	-	-	-
Executive						
Mr Lewis - CFO	93,919	-	(93,919)	-	-	-
Total	233,471	-	(233,471)	-	-	-
2022						
Executive Director						
Dr Brookins - CTO	610,763	-	(471,211)	-	139,552	139,552
Executive						
Mr Lewis - CFO	367,115	-	(273,196)	-	93,919	93,919
Total	977,878	-	(744,407)	-	233,471	233,471

Share Appreciation Rights

The number of share appreciation rights held during the reporting periods by KMPs, including their personally related parties, is set out below:

	Balance at start of year	Granted	Balance at end of year	Vested - not issue
2023				
Executive Directors				
Mr Blackburn - CEO & MD	-	22,843,648	22,843,648	1,613,141
Dr Brookins - CTO	13,377,148	6,505,703	19,882,851	-
Total Executive Directors	13,377,148	29,349,351	42,726,499	1,613,141
Executive				
Mr Lewis - CFO	11,253,792	5,473,052	16,726,844	-
Total	24,630,940	34,822,403	59,453,343	1,613,141
2022				
Executive Directors				
Dr Brookins - CTO	6,505,703	6,871,445	13,377,148	-
Executive				
Mr Lewis - CFO	5,473,052	5,780,740	11,253,792	-
Total	11,978,755	12,652,185	24,630,940	-

Share appreciation rights granted and current year expense by plan year:

	Grant date	Vesting date	Expiry date	Opening price	Fully vested target price	FV at grant date	Total grants	Current year exp
Mr Blackburn, CEO & MD								
2023	16-Nov-22	23-Sep-25	23-Sep-27	A\$0.030	A\$0.171	A\$0.0046	6,712,233	5,178
Joining Award	16-Nov-22	Various ¹	23-Sep-27	A\$0.030	A\$0.150	A\$0.0056	16,131,415	15,114
Total							22,843,648	20,293
Dr Brookins, CTO and Director								
2023	16-Nov-22	23-Sep-25	23-Sep-27	A\$0.030	A\$0.171	A\$0.0046	6,505,703	5,019
2022	23-Sep-21	23-Sep-24	23-Sep-26	A\$0.076	A\$0.148	A\$0.0380	6,871,445	56,375
2021	23-Sep-20	23-Sep-23	23-Sep-25	A\$0.071	A\$0.139	A\$0.0320	6,505,703	7,039
Total							19,882,851	68,433
Mr Lewis, CFO								
2023	16-Nov-22	23-Sep-25	23-Sep-27	A\$0.030	A\$0.171	A\$0.0046	5,473,052	4,222
2022	23-Sep-21	23-Sep-24	23-Sep-26	A\$0.076	A\$0.148	A\$0.0380	5,780,740	47,427
2021	23-Sep-20	23-Sep-23	23-Sep-25	A\$0.071	A\$0.139	A\$0.0320	5,473,052	5,922
Total							16,726,844	57,571
Total							59,453,343	146,297

¹ Of the total SARs granted as part of the Joining Award, 75% vest based on the CAGR as set by the Board (see section (a) below) while 25% vest over time with full vesting by September 2025.

The expense is recognised over the vesting period based on the originally calculated Monte Carlo option fair value.

Vested Rights:

- (a) Participants are entitled to the amount by which the closing share price exceeds the opening share price.
- (b) Shares will be issued in the amount equal to the closing share price less opening share price divided by closing share price then multiplied by the vested and exercised SARs. Closing price is defined as the 20-day volume weighted average price ("VWAP") as at the vesting date of the relevant SAR.

Vesting Conditions:

- (a) The Board sets the Fully Vested Target Price by applying a compounded annual growth rate ("CAGR") on the opening share price for the term of the relevant SAR. The opening price is the 20-day VWAP from the issuance date of the annual report or as set by the Board. Partial vesting will begin at the approved minimum CAGR at an approved percentage of the total SAR grants. Vesting from the minimum CAGR to the fully vested CAGR (i.e. Fully Vested Target Price) will occur on a linear scale between the minimum percentage of the total SAR grants and 100% of the total SAR grants.
- (b) Continued employment through the vesting date.

Options:

No options were granted or outstanding to KMPs during the reportable period.

Shares:

The value of shares issued or agreed to be issued in lieu of salary during the year was \$161,750 (2022: \$13,500). The calculation of these shares was presented and approved at the 2022 AGM.

The number of shares in the Company held during the financial year by each director and other key management personnel, including their personally related parties, is set out below:

	Balance at start of year	Granted & issued shares in lieu of salary	Conversion of performance rights	Other changes ⁽¹⁾	Balance at end of year	Granted & to be issued shares in lieu of salary	Balance at end of year including shares to be issued
2023							
Non-Executive Directors							
Mrs Garnon	3,326,397	3,289,721	-	-	6,616,118	3,853,479	10,469,597
BGen Cheney	848,914	-	-	-	848,914	-	848,914
Mr Moore	79,151,331	2,572,967	-	-	81,724,298	3,013,893	84,738,191
Mr Dennis	364,536	-	-	55,964	420,500	-	420,500
Total Non-Executive Directors	83,691,178	5,862,688	-	55,964	89,609,830	6,867,372	96,477,202
Executive Directors							
Mr Blackburn - CEO & MD	-	-	-	-	-	-	-
Dr Brookins - CTO	5,123,086	-	139,552	-	5,262,638	-	5,262,638
Total Executive Directors	5,123,086	-	139,552	-	5,262,638	-	5,262,638
Executive							
Mr Lewis - CFO	725,671	-	93,919	-	819,590	-	819,590
Total	89,539,935	5,862,688	233,471	55,964	95,692,058	6,867,372	102,559,430
2022							
Non-Executive Directors							
Mrs Garnon	2,783,458	270,212	-	272,727	3,326,397	-	3,326,397
BGen Cheney	863,929	175,638	-	(190,653)	848,914	-	848,914
Mr Moore	76,145,234	-	-	3,006,097	79,151,331	-	79,151,331
Mr Dennis	-	364,536	-	-	364,536	-	364,536
Total Non-Executive Directors	79,792,621	810,386	-	3,088,171	83,691,178	-	83,691,178
Executive Directors							
Dr Brookins - CTO	5,190,875	-	471,211	(539,000)	5,123,086	-	5,123,086
Executive							
Mr Lewis - CFO	452,475	-	273,196	-	725,671	-	725,671
Total	85,435,971	810,386	744,407	2,549,171	89,539,935	-	89,539,935

(1) Other changes include, amongst other movements, open market transactions.

G. Additional Disclosures Relating to KMP

The interests of the Directors and other KMP of the Company in shares and rights (including shares to be issued) are set out below:

	No. of ordinary shares	No. of share appreciation rights
Non-Executive Directors		
Mrs Garnon	10,469,597	-
BGen Cheney	848,914	-
Mr Moore	84,738,191	-
Mr Dennis	420,500	-
Total Non-Executive Directors	96,477,202	-
Executive Directors		
Mr Blackburn - CEO & MD	-	22,843,648
Dr Brookins - CTO	5,262,638	19,882,851
Total Executive Directors	5,262,638	42,726,499
Executive		
Mr Lewis - CFO	819,590	16,726,844
Total	102,559,430	59,453,343

H. Loans to KMP

There are no loans currently provided to KMP of the Company.

THIS IS THE END OF THE AUDITED REMUNERATION REPORT

SHARES UNDER OPTION/WARRANT

As at the date of this report there were NIL unlisted options and warrants (2022: 3,829,787).

No option/warrant holder has any right under the options/warrants to participate in any other share issue of the Company or any other entity. The options/warrants are exercisable at any time after vesting and on or before the expiry date. Refer to Note 17(f) for details of the movements of the options during the year and ASX announcements for options exercised after the year end and to the date of this report.

INSURANCE OF OFFICERS

During the reporting period, the Company paid a premium in respect to a contract insuring the Directors and Officers of the Company against potential liabilities incurred as a director or officer to the extent permitted by the Corporations Act 2001 (Cth). Due to a confidentiality clause in the policy, the amount of the premium has not been disclosed.

The potential liabilities insured against are legal costs that may be incurred in defending civil or criminal proceedings that may be brought against the officers in their capacity as officers of the Company, and any other payments arising from liabilities incurred by the officers in connection with such proceedings, other than where such liabilities arise out of conduct involving a wilful breach of duty by the officers or the improper use by the officers of their position or of information to gain advantage for themselves or someone else or to cause detriment to the Company. It is not possible to apportion the premium between amounts relating to the insurance against legal costs and those relating to other liabilities.

PROCEEDINGS ON BEHALF OF THE COMPANY

No person has applied to the Court under section 237 of the Corporations Act 2001 (Cth) for leave to bring proceedings on behalf of the economic entity, or to intervene in any proceedings to which the entity is a party, for the purpose of taking responsibility on behalf of the entity for all or part of those proceedings. No proceedings have been brought or intervened in or on behalf of the entity with leave of the Court under section 237 of the Corporations Act 2001 (Cth).

ROUNDING OF AMOUNTS

Amounts in the financial statements and Directors' report are presented in US dollars and all values are rounded to the nearest dollar, unless otherwise stated.

INDEMNITY OF AUDITORS

The Company has agreed to indemnify their auditors, Grant Thornton Audit Pty Ltd, to the extent permitted by law, against any claim by a third party arising from the Company's breach of their agreement. The indemnity stipulates that Alexium will meet the full amount of any such liabilities including a reasonable amount of legal costs.

NON-AUDIT SERVICES

There were no non-audit services provided by the Company's auditor, Grant Thornton Audit Pty Ltd in the current financial year.

AUDITOR'S INDEPENDENCE DECLARATION

A copy of the auditor's independence declaration as required under section 307C of the Corporations Act 2001 (Cth) is attached.

This report is made in accordance with a resolution of the Directors.



Rosheen Garnon

Chair

Dated 25 August 2023

**Grant Thornton Audit Pty Ltd**

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383 Kent Street
Sydney NSW 2000
Locked Bag Q800
Queen Victoria Building NSW
1230

T +61 2 8297 2400

Auditor's Independence Declaration

To the Directors of Alexium International Group Limited

In accordance with the requirements of section 307C of the *Corporations Act 2001*, as lead auditor for the audit of Alexium International Group Limited for the year ended 30 June 2023, I declare that, to the best of my knowledge and belief, there have been:

- a no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- b no contraventions of any applicable code of professional conduct in relation to the audit.

Grant Thornton Audit Pty Ltd
Chartered Accountants

M R Leivesley
Partner – Audit & Assurance
Sydney, 25 August 2023

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CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 JUNE 2023

	Note	2023 US\$	2022 US\$
Revenue	3	7,210,574	8,174,937
Cost of sales		(4,388,973)	(4,845,222)
Gross Profit		2,821,601	3,329,715
Administrative expenses	4	(3,607,981)	(3,365,866)
Sales and marketing expenses		(524,222)	(846,727)
Research and development costs	5	(630,584)	(1,177,513)
Impairment of intangibles	12	-	(1,026,377)
Other expenses		(256,897)	(187,703)
Operating expenses		(5,019,684)	(6,604,186)
Loss before finance costs		(2,198,083)	(3,274,471)
Interest expense	25	(983,155)	(776,042)
Gain/(Loss) on embedded derivative	16	794,098	688,060
Gain/(Loss) on debt extinguishment	15	(576,374)	-
Interest earned	3	12,571	2,182
Total finance costs		(752,860)	(85,800)
Loss before tax		(2,950,943)	(3,360,271)
Tax expense	7	-	-
Loss for the year after tax		(2,950,943)	(3,360,271)
Other comprehensive income - Exchange differences on translation of foreign operations which may subsequently be reclassified to profit or loss		118,208	276,138
Total comprehensive loss for the year		(2,832,735)	(3,084,133)
Loss for the year attributable to members of the group		(2,950,943)	(3,360,271)
Total comprehensive loss for the year attributable to members of the group		(2,832,735)	(3,084,133)
Basic and diluted loss per share (cents)	8	(0.46)	(0.52)

This consolidated statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes to the financial statements.

	Note	2023 US\$	2022 US\$
Current Assets			
Cash and cash equivalents	19	513,277	1,027,095
Trade and other receivables	9	1,046,950	579,052
Inventories	10	824,981	1,599,220
Other current assets		87,199	90,504
Total Current Assets		2,472,407	3,295,871
Non-Current Assets			
Other financial assets		17,871	16,672
Property, plant and equipment	11	730,530	967,589
Intangible assets	12	1,695,365	1,569,167
Right-of-use asset	11	465,157	574,606
Total Non-Current Assets		2,908,923	3,128,034
Total Assets		5,381,330	6,423,905
Current Liabilities			
Trade and other payables	13	990,296	816,423
Lease liabilities	14	136,498	118,253
Borrowings	15	161,345	178,626
Total Current Liabilities		1,288,139	1,113,302
Non-Current Liabilities			
Borrowings	15	3,787,189	2,815,195
Derivative liability	16	688,364	182,452
Lease liabilities	14	600,774	737,273
Total Non-Current Liabilities		5,076,327	3,734,920
Total Liabilities		6,364,466	4,848,222
Net (Liabilities)/Assets		(983,136)	1,575,683
Equity			
Contributed equity	17	66,610,771	66,523,851
Reserves		(974,429)	(1,195,699)
Accumulated losses		(66,619,478)	(63,752,468)
Total Equity		(983,136)	1,575,683

This consolidated statement of financial position should be read in conjunction with the accompanying notes to the financial statements.



	Contributed Equity US\$	Shares to be Issued Reserve US\$	Options & Warrants Reserve US\$	Performance Rights Reserve US\$	Foreign Currency Translation Reserve US\$	Consolidated Accumulated Losses US\$	Total US\$
Balance at 1 July 2022	66,523,851	-	83,934	444,750	(1,724,383)	(63,752,468)	1,575,684
Loss for the period	-	-	-	-	-	(2,950,943)	(2,950,943)
Foreign currency translation	-	(1,763)	-	-	119,971	(1)	118,207
Total comprehensive income / (loss)	-	(1,763)	-	-	119,971	(2,950,944)	(2,832,736)
Transactions with owners in their capacity as owners:							
Expiration of outstanding options	-	-	(83,934)	-	-	83,934	-
Capital raising costs	(1,906)	-	-	-	-	-	(1,906)
Share appreciation rights expense	-	-	-	116,322	-	-	116,322
Performance rights exercised	9,076	-	-	(9,076)	-	-	-
Share-based payment in lieu of salary	79,750	79,750	-	-	-	-	159,500
Balance at 30 June 2023	66,610,771	77,987	-	551,996	(1,604,412)	(66,619,478)	(983,136)

Balance at 1 July 2021	66,265,398	-	83,934	221,783	(2,000,521)	(60,392,197)	4,178,397
Loss for the period	-	-	-	-	-	(3,360,271)	(3,360,271)
Foreign currency translation	-	-	-	-	276,138	-	276,138
Total comprehensive income / (loss)	-	-	-	-	276,138	(3,360,271)	(3,084,133)
Transactions with owners in their capacity as owners:							
Capital raising costs	(4,284)	-	-	-	-	-	(4,284)
Share appreciation rights expense	-	-	-	293,798	-	-	293,798
Performance rights expense	-	-	-	9,076	-	-	9,076
Performance rights exercised	79,907	-	-	(79,907)	-	-	-
Share-based payments in lieu of salary	38,250	-	-	-	-	-	38,250
Share-based payments for services	144,580	-	-	-	-	-	144,580
Balance at 30 June 2022	66,523,851	-	83,934	444,750	(1,724,383)	(63,752,468)	1,575,683

This consolidated statement of changes in equity should be read in conjunction with the accompanying notes to the financial statements.



	Note	2023 US\$	2022 US\$
Cash flow from operating activities			
Receipts from customers and other income		6,635,226	8,924,204
Payments to suppliers and employees		(7,655,906)	(10,246,599)
Interest received		12,566	2,167
Interest and other costs of finance paid		(128,997)	(275,535)
Goods & services tax received		33,513	24,185
Net cash flows (used in) operating activities	19(b)	(1,103,598)	(1,571,578)
Cash flows from investing activities			
Purchase of property, plant, and equipment		(18,761)	(52,380)
Payments for development costs		(367,781)	(302,437)
Net cash flows (used in) investing activities		(386,542)	(354,817)
Cash flows provided by financing activities			
Proceeds from borrowings		5,771,451	251,074
Proceeds on substantial modification of convertible note		1,022,460	-
Transaction costs related to issues of shares		(937)	(4,285)
Transaction costs related to loans and borrowings		-	(57,768)
Repayment of lease liabilities	14	(118,253)	(94,258)
Repayment of borrowings		(5,678,961)	(20,450)
Net cash flows (used in) financing activities		995,760	74,314
Net (decrease) in cash and cash equivalents		(494,380)	(1,852,082)
Cash and cash equivalents at beginning of year		1,027,095	2,932,673
Effect of exchange rate changes on cash and cash equivalents		(19,438)	(53,496)
Cash and cash equivalents at end of year	19(a)	513,277	1,027,095

This consolidated statement of cash flows should be read in conjunction with the accompanying notes to the financial statements.

1. CORPORATE INFORMATION

The consolidated financial statements of Alexium International Group Limited and its subsidiaries (collectively the “Company” or “Group”) for the year ended 30 June 2023 were authorised for issue in accordance with a resolution of the directors on 25 August 2023. Alexium International Group Limited (‘Parent’) is a company limited by shares incorporated and domiciled in Australia, whose shares are publicly traded on the Australian Securities Exchange under the ticker AJAX. These financial statements include the consolidated financial statements and notes of Alexium International Group Limited and its controlled entities. This financial report, the comparative period within, and all future financial reports, are presented in US Dollars. This presentation aligns the Company’s financial reporting with the nature of the business operations which primarily occur in the United States. The nature of the operations and principal activities of the Company are described in the Directors’ Report.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of preparation

These general-purpose financial statements have been prepared in accordance with Australian Accounting Standards, Australian Accounting Interpretations, other authoritative pronouncements of the Australian Accounting Standards Board (“AASB”) and the Corporations Act 2001 (Cth). The Company is a for-profit entity for the purpose of preparing the financial statements. Australian Accounting Standards set out accounting policies that the AASB has concluded would result in financial statements containing relevant and reliable information about transactions, events, and conditions to which they apply. Compliance with Australian Accounting Standards ensures that the financial statements and notes also comply with International Financial Reporting Standards as issued by the International Accounting Standards Board. Material accounting policies adopted in the preparation of the financial statements are presented below. They have been consistently applied unless otherwise stated. The financial statements have been prepared on an accrual basis and are based on historical costs, modified where applicable by the measurement at fair value.

(b) New and amended standards adopted by the Company in this financial report

There were no new or revised Standards and Interpretations issued by the AASB that were adopted by the Company that are relevant to its operations and effective for the reporting period.

(c) Impact of standards issued but not yet applied by the Company

Several new standards are effective for annual periods beginning after 1 July 2023 and earlier application is permitted; however, the Company has not early adopted the new or amended standards in preparing these consolidated financial statements. For future reporting purposes, the Company has reviewed the new and amended standards and they are either not applicable to the Company or are not expected to have a significant impact on the Company’s consolidated financial statements.

(d) Company Accounting Policies

Fair Value of Assets and Liabilities

The Company measures some of its assets and liabilities at fair value on either a recurring or non-recurring basis, depending on the requirements of the applicable Australian Accounting Standard. Fair value is the price the Company would receive to sell an asset or would have to pay to transfer a liability in an orderly (i.e. unforced) transaction between independent, knowledgeable, and willing market participants at the measurement date.

As fair value is a market-based measure, the closest equivalent observable market pricing information is used to determine fair value. Adjustments to market values may be made with regard to the characteristics of the specific asset or liability. The fair values of assets and liabilities that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data.

To the extent possible, market information is extracted from either the principal market for the asset or liability (i.e. the market with the greatest volume and level of activity for the asset or liability) or, in the absence of such a market, the most advantageous market available to the entity at the end of the reporting period (i.e. the market that maximises the receipts from the sale of the asset or minimises the payments made to transfer the liability, after taking into account transaction costs and transport costs). For non-financial assets, the fair value measurement also considers a market participant’s ability to use the asset in its highest and best use or to sell it to another market participant that would use the asset in its highest and best use.

The fair value of liabilities and the entity’s own equity instruments (excluding those related to share-based payment arrangements) may be valued, where there is no observable market price in relation to the transfer of such financial instruments, by reference to observable market information where such instruments are held as assets. Where this information is not available, other valuation techniques are adopted and, where significant, are detailed in the respective note to the financial statements.

Valuation techniques

In the absence of an active market for an identical asset or liability, the Company selects and uses one or more valuation techniques to measure the fair value of the asset or liability. The Company selects a valuation technique that is appropriate in the circumstances and for which sufficient data is available to measure fair value. The availability of sufficient and relevant data primarily depends on the specific characteristics of the asset or liability being measured. The valuation techniques selected by the Company are consistent with one or more of the following valuation approaches:

- Market approach uses prices and other relevant information generated by market transactions for identical or similar assets or liabilities.
- Income approach converts estimated future cash flows or income and expenses into a single discounted present value.
- Cost approach reflects the current replacement cost of an asset at its current service capacity.

Each valuation technique requires inputs that reflect the assumptions that buyers and sellers would use when pricing the asset or liability, including assumptions about risks. When selecting a valuation technique, the Company gives priority to those techniques that maximise the use of observable inputs and minimise the use of unobservable inputs. Inputs that are developed using market data (such as publicly available information on actual transactions) and reflect the assumptions that buyers and sellers would generally use when pricing the asset or liability are considered observable, whereas inputs for which market data is not available and therefore are developed using the best information available about such assumptions are considered unobservable.

Fair value hierarchy

AASB 13: *Fair value measurement* requires the disclosure of fair value information by level of the fair value hierarchy, which categorises fair value measurements into one of three possible levels based on the lowest level that an input that is significant to the measurement can be categorised into as follows:

Level 1: Measurements based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2: Measurements based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Measurements based on unobservable inputs for the asset or liability.

The fair values of assets and liabilities that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data. If all significant inputs required to measure fair value are observable, the asset or liability is included in Level 2. If one or more significant inputs are not based on observable market data, the asset or liability is included in Level 3.

The Company will change the categorisation within the fair value hierarchy only in the following circumstances:

- if a market that was previously considered active (Level 1) became inactive (Level 2 or Level 3) or vice versa; or
- if significant inputs that were previously unobservable (Level 3) became observable (Level 2) or vice versa.

When a change in the categorisation occurs, the Company recognises transfers between levels of the fair value hierarchy (i.e., transfers into and out of each level of the fair value hierarchy) on the date the event or change in circumstances occurred.

(e) Principles of Consolidation

The consolidated financial statements incorporate all assets, liabilities, and results of the Company. Subsidiaries are entities the parent controls. The parent controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and can affect those returns through its power over the entity. A list of the subsidiaries is provided in Note 21.

The assets, liabilities and results of all subsidiaries are fully consolidated into the financial statements of the Company from the date on which control is obtained by the Company. The consolidation of a subsidiary is discontinued from the date that control ceases. Intercompany transactions, balances and unrealised gains or losses on transactions between Company entities are fully eliminated on consolidation. Accounting policies of subsidiaries have been changed and adjustments made where necessary to ensure uniformity of the accounting policies adopted by the Company.

Equity interests in a subsidiary not attributable, directly, or indirectly, to the Company are presented as "non-controlling interests". The Company initially recognises non-controlling interests that are present ownership interests in subsidiaries and are entitled to a proportionate share of the subsidiary's net assets on liquidation at either fair value or at the non-controlling interests' proportionate share of the subsidiary's net assets. After initial recognition, non-controlling interests are attributed their share of profit or loss and each component of other comprehensive income. Non-controlling interests are shown separately within the equity section of the statement of financial position and statement of comprehensive income.

(f) Foreign currency translation

The consolidated financial statements are presented in United States Dollars (\$). The functional currency of the Parent is Australian Dollar (A\$) and the functional currency of the subsidiary is the US Dollar (\$).

Transactions in foreign currencies are initially recorded in the functional currency at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the reporting date and exchange differences are recognised in profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the date of the initial transaction. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. All resulting exchange differences are recognised in other comprehensive income.

As at the reporting date the assets and liabilities of these subsidiaries are translated into the presentation currency at the rate of exchange ruling at the reporting date and the statement of comprehensive income is translated at the weighted average exchange rates for the year. All resulting exchange differences are recognised in other comprehensive income.

On disposal of a foreign entity, the cumulative exchange differences are reclassified to profit or loss as part of the gain or loss on sale.

(g) Property, plant, and equipment

Owned assets

Items of property, plant and equipment are stated at cost less accumulated depreciation (see below) and impairment losses. Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items.

Leased assets

The Company recognises all lease liabilities and corresponding right of use assets, except for short-term (12 months or less) and low value leases, on the balance sheet. The assets and liabilities are initially measured at the present value of future lease payments using the Company's incremental borrowing rate unless the interest rate implicit in the lease can be readily determined. The Company recognises depreciation of leased assets and interest on lease liabilities over the term of the lease.

Subsequent costs

The Company recognises in the carrying amount of an item of property, plant, and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied within the item will flow to the consolidated entity and the cost of the item can be measured reliably. All other costs are recognised in profit or loss as an expense as incurred.

Depreciation

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each asset.

The estimated useful lives in the current and comparative years are as follows:

Asset Type	Years
Computer equipment	3 years
Machinery and equipment	3 to 15 years
Furniture, fixtures, and office equipment	3 to 10 years
Leased plant and equipment	Shorter of the lease term or the useful life

The residual value, the useful life and the depreciation method applied to an asset are reassessed at least annually.

(h) Intangible assets

Acquired intangible assets

Intangible assets acquired separately are capitalised at cost. Following initial recognition, the cost model is applied to the class of intangible assets whereby capitalised costs are amortised on a straight-line basis over their estimated useful lives, which is considered five years, as these assets are considered finite. Other intangible assets that are acquired by the Company are stated at cost less accumulated amortisation and impairment losses.

Internally Generated Intangible Assets

Expenditures on internally generated goodwill and brands are recognised in the statement of comprehensive income as an expense as incurred. Expenditures on the research phase of projects to develop new specialty chemicals are recognised as an expense as incurred. Costs that are directly attributable to a project's development phase are recognised as intangible assets, provided they meet the following recognition requirements:

- Development costs can be measured reliably;
- Project is technically and commercially feasible;
- The Company intends to and has sufficient resources to complete the project;
- The Company has the ability to use or sell the asset; and
- The asset will generate probable future economic benefits.

Costs directly attributable to capitalised development include employee expenses incurred on technology development, external testing fees, and product trial costs. Costs not meeting these criteria are expensed as incurred. The ultimate recoupment of costs carried forward for capitalised development is dependent on the successful development and commercialisation of the Company's technology. Any internally generated asset that is not yet complete or not fully amortised is subject to impairment testing.

Subsequent expenditure

Subsequent expenditure on capitalised intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditures are expensed as incurred.

Amortisation

Goodwill and intangible assets with an indefinite life are systematically tested for impairment at each annual reporting date. Capitalised development costs, patents, and trademarks with a finite life are amortised based on estimated future economic life. The useful life of ready for use development assets is estimated at five years. Amortisation charges are included as an expense in the consolidated statement of profit or loss and other comprehensive income.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised as profit or loss. Intangible assets' useful lives are assessed as either finite or indefinite. Amortisation is charged on assets with finite lives with the expense taken into profit or loss. Intangible assets are tested for impairment where an indicator of impairment exists. Amortisation methods, useful lives and residual values are reviewed at each financial year-end and adjusted accordingly.

(i) Impairment of assets

At each reporting date, the Company assesses whether there is any indication that an asset may be impaired. Where an indicator of impairment exists, the Company makes a formal estimate of the recoverable amount or fully impairs the asset to Nil based on conservatism and an assessment of market value on the assumption no changes are made to the asset. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount to profit or loss.

Recoverable amount is the greater of fair value less costs to sell and value in use. The recoverable amount is determined for an individual asset, unless the asset's value in use cannot be estimated to be close to its fair value less cost to sell and it does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

(j) Trade and other receivables

Trade receivables are recognised and carried at original invoice amount less any expected credit losses (ECL) determined under the simplified approach to accounting for trade and other receivables as detailed in AASB 9. These are the expected shortfalls in contractual cash flows, considering the potential for default at any point during the life of the financial instrument. In calculating, the Group uses its historical experience, external indicators, and forward-looking information to calculate the expected credit losses. The Group assesses impairment of trade receivables on a collective basis as they possess shared credit risk characteristics. They have been grouped based on the days past due.

(k) Determination and presentation of operating segments

For management purposes, the Company is organised into one main operating segment which involves the development and commercialisation of its proprietary flame-retardant and phase change material technologies and selling its specialised chemistry to customers. All Company activities are interrelated, and discrete financial information is reported to the Chief Executive Officer as a single segment. Accordingly, all significant operating decisions are based upon analysis of the Company as one segment. The Company applies *AASB 8 Operating Segments* that requires a 'management approach' of reporting segment information on the same basis as that used for internal reporting purposes.

An operating segment is a component of the Company that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Company's other components. An operating segment's results are reviewed regularly by the Board to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. The Board considers the business from both a product and a geographical perspective and takes the view that the Company operates under a single operating segment.

(l) Cash and cash equivalents

Cash and short-term deposits in the balance sheet comprise cash on hand and short-term deposits. For the purposes of the Statement of Cash Flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

(m) Financial instruments

Recognition and derecognition

Financial assets and financial liabilities are recognised when the Company becomes a party to the contractual provisions of the financial instrument. Financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire, or when the financial asset and substantially all the risks and rewards are transferred. A financial liability is derecognised when it is extinguished, discharged, cancelled, or expires.

Classification and initial measurement of financial assets

Except for those trade receivables that do not contain a significant financing component and are measured at the transaction price in accordance with AASB 15, all financial assets are initially measured at fair value adjusted for transaction costs (where applicable).

Financial assets, other than those designated and effective as hedging instruments, are classified into the following categories:

- amortised cost
- fair value through profit or loss (FVTPL)
- fair value through other comprehensive income (FVOCI).

All income and expenses relating to financial assets that are recognised in profit or loss are presented within finance costs, finance income or other financial items, except for impairment of trade receivables which is presented within other expenses.

Financial assets at amortised cost

Financial assets are measured at amortised cost if the assets meet the following conditions (and are not designated as FVTPL):

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

After initial recognition, these are measured at amortised cost using the effective interest method. Discounting is omitted where the effect of discounting is immaterial. The Company's cash and cash equivalents, trade and most other receivables fall into this category of financial instruments.

Financial assets at fair value through profit or loss (FVTPL)

Financial assets that are held within a different business model other than 'hold to collect' or 'hold to collect and sell' are categorised at fair value through profit and loss. Further, irrespective of business model financial assets whose contractual cash flows are not solely payments of principal and interest, all financial assets in the periods presented are accounted for at FVTPL. All derivative financial instruments fall into this category, except for those designated and effective as hedging instruments, for which the hedge accounting requirements apply (see below).

Assets in this category are measured at fair value with gains or losses recognised in profit or loss. The fair values of financial assets in this category are determined by reference to active market transactions or using a valuation technique where no active market exists.

Financial assets at fair value through other comprehensive income (FVOCI)

The Company accounts for financial assets at FVOCI if the assets meet the following conditions:

- they are held under a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets
- their contractual terms give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding

Any gains or losses recognised in other comprehensive income (OCI) will be recycled upon derecognition of the asset. In the periods presented, the Company does not have any financial assets categorised as FVOCI.

Impairment of financial assets

In accordance with AASB 9, impairment requirements use more forward-looking information to recognise expected credit losses – the expected credit loss (ECL) model. Instruments within the scope of the ECL model included loans and other debt-type financial assets measured at amortised cost and FVOCI, trade receivables, contract assets recognised and measured under AASB 15 and loan commitments and some financial guarantee contracts (for the issuer) that are not measured at fair value through profit or loss.

Recognition of credit losses is not dependent on the Company first identifying a credit loss event. Instead, the Company considers a broader range of information when assessing credit risk and measuring expected credit losses, including past events, current conditions, reasonable and supportable forecasts that affect the expected collectability of the future cash flows of the instrument.

In applying this forward-looking approach, a distinction is made between:

- Financial instruments that have not deteriorated significantly in credit quality since initial recognition or that have low credit risk ('Stage 1')
- Financial instruments that have deteriorated significantly in credit quality since initial recognition and whose credit risk is not low ('Stage 2').
- Financial instruments that have objective evidence of impairment at the reporting date ('Stage 3')

'12-month expected credit losses' are recognised for the first category (i.e. Stage 1) while 'lifetime expected credit losses' are recognised for the second category (i.e. Stage 2).

Measurement of the expected credit losses measurement is determined by a probability-weighted estimate of credit losses over the expected life of the instrument.

Trade and other receivables and contract assets

The Company makes use of a simplified approach in accounting for trade and other receivables as well as contract assets and records the loss allowance as lifetime expected credit losses. These are the expected shortfalls in contractual cash flows, considering the potential for default at any point during the life of the financial instrument. In calculating, the Company uses its historical experience, external indicators, and forward-looking information to calculate the expected credit losses using a provision matrix. The Company assesses impairment of trade receivables on a collective basis as they possess shared credit risk characteristics and they have been grouped based on the days past due.

Classification and measurement of financial liabilities

The Company's financial liabilities include borrowings, trade and other payables and derivative financial instruments. Financial liabilities are initially measured at fair value, and, where applicable, adjusted for transaction costs unless the Company designated a financial liability at fair value through profit or loss. Subsequently, financial liabilities are measured at amortised cost using the effective interest method except for derivatives and financial liabilities designated at FVTPL, which are carried subsequently at fair value with gains or losses recognised in profit or loss (other than derivative financial instruments that are designated and effective as hedging instruments). All interest-related charges and, if applicable, changes in an instrument's fair value that are reported in profit or loss are included within finance costs or finance income.

(n) Embedded derivative

The Company has issued liability classified embedded derivatives in connection with its convertible debt. An embedded derivative is a component of a hybrid instrument that also includes a non-derivative host contract with the effect that some of the cash flows of the combined instrument vary in a way like a stand-alone derivative. The embedded derivative is separated from the host contract and accounted for as a derivative if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract. The embedded derivative is measured at fair value with changes in value being recorded in profit or loss.

(o) Trade and other payables

Trade and other payables are carried at amortised cost. They represent liabilities for goods and services provided to the Company prior to the end of the financial year that are unpaid and arise when the Company becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured and are usually paid within 60 days of recognition.

(p) Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) because of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Company expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the statement of comprehensive income, net of any reimbursement. Provisions are measured at the estimated expenditure required to settle the present obligation, based on the most reliable evidence available at the reporting date, including the risks and uncertainties associated with the present obligation. Where there are several similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations. Provisions are discounted to their present values, where the time value of money is material.

(q) Contributed equity

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

(r) Revenue recognition

In accordance with the standard, revenue is recognised and measured when the entity satisfies a performance obligation by transferring a promised good or service (i.e., an asset) to a customer. The transfer is complete when the “FOB Shipping Point” terms are satisfied at the time of shipment which in turn completes the performance obligation.

Sale of goods

Revenue is recognised at a specific point in time and measured when the entity satisfies a performance obligation by transferring a promised good or service (i.e., an asset) to a customer. AASB 15 - Revenue from Contracts with Customers outlines the accounting requirements for when and how revenue is recognised using one core principle: “Recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.” This is accomplished by using a 5-step recognition process consisting of the following:

- 1.) *Identify the contract* - The Company utilises a set of criteria to clearly identify the existence of contracts with customers, which includes contract approval by both parties, identification of each party’s rights and commitments, determination of payment terms, presence of commercial substance and a probability that the consideration will be collected.
- 2.) *Identify the performance obligations* - The Company has identified the sole performance obligation of customer contracts to be the complete transfer of the goods to the customer. In accordance with AASB 15, there are no additional goods or services, warranties, repurchase agreements, or public return policies, or other limitations of the seller that would not allow the Company to consider its performance completed at this time of transfer. The Company considers the transfer complete in line with “FOB Shipping Point” terms and recognises the completion of this performance obligation when products are shipped.
- 3.) *Determine the transaction price* - The Company considers the transaction price to be the amount of consideration to which it expects to be entitled in exchange for transferring promised goods or services to a customer. As and when a performance obligation is satisfied the Company recognises revenue to the extent of the transaction price allocated to that performance obligation considering the impact of constraints arising from variable consideration.
- 4.) *Allocate the transaction price to separate performance obligations* - Given that there is a single performance obligation to each contract, and the price is clearly identified in the contract, the Company allocates the full contract price to the transfer of goods discussed in Step 2, except for combined contracts noted as having variable consideration.
- 5.) *Recognise revenue when each obligation is satisfied* - at contract inception the Company has determined that the sole performance obligation is the complete transfer of goods to the customer. The Company must then determine the specific point in time at which it is appropriate to recognise revenue for the contract. AASB 15 states that an entity shall consider indicators of the transfer of control, which include, but are not limited to, the following:
 - Company has a present right to payment for the asset;
 - Customer has legal title to the asset;
 - Company has transferred physical possession of the asset;
 - Customer has the significant risks and rewards of ownership of the asset; and
 - Customer has accepted the asset

Management recognises that the application of the control criteria requires judgment and there are various factors to consider, as described above. Accordingly, management believes that control is transferred in accordance with the shipping terms, as this is the point in time that the customer obtains legal title, when customer obtains the risk and rewards of ownership, and when the customer has an obligation to pay for the asset. The standard discusses that an entity should consider whether there is any agreement to repurchase the asset transferred to the customer, or a component. This topic is not applicable to the Company as it is not the practice nor discussed in any contracts. Management recognises that contracts and arrangements could change as the Company enters new markets and expands its customer base. Management will continue to monitor any changes to ensure the accounting is in line with the context of AASB 15.

Interest and dividends

Interest income is recorded when earned based on cash balances. Interest expenses are reported on an accrual basis using the effective interest method. Dividends are recognised at the time the right to receive payment is established.

(s) Income and other taxes

Deferred income tax is provided on all temporary differences at the statement of financial position date between the tax bases of assets and liabilities and their carrying amounts for the financial reporting purposes.

Deferred income tax liabilities are recognised for all taxable temporary differences:

- Except where the deferred income tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- In respect of taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences and the carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and the carry-forward of unused tax assets and unused tax losses can be utilised:

- Except where the deferred income tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred income tax assets is reviewed at each statement of financial position date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised. Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised, or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the statement of financial position date. Income taxes relating to items recognised directly in equity are recognised in equity and not in the statement of comprehensive income.

Other taxes

Revenues, expenses, and assets are recognised net of the amount of GST except:

- where the GST incurred on a purchase of goods and services is not recoverable from the taxation authority, in which case the GST is recognised as part of the cost of acquisition of the asset or as part of the expense item as applicable; and
- receivables and payables are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the statement of financial position. Cash flows are included in the Statement of Cash Flows on a gross basis and the GST component of cash flows arising from investing and financing activities, which is recoverable from, or payable to, the taxation authority is classified as operating cash flows. Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the taxation authority.

(t) Earnings per share

Basic earnings per share ('EPS') is calculated by dividing the net profit attributable to members of the parent entity for the reporting year, after excluding any costs of servicing equity (other than ordinary shares and converting preference shares classified as ordinary shares of EPS calculation purposes), by weighted average number of ordinary shares of the Company.

(u) Employee benefits

Termination benefits

Termination benefits are recognised as an expense when the Company is committed demonstrably, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits because of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognised as an expense if the Company has made an offer of voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably. If benefits are payable more than 12 months after the reporting date, then they are discounted to their present value.

Long-Term Employee Benefits

The Company's liabilities for annual leave are included in other current liabilities. Any adjustments and changes in assumptions are recognised in profit or loss in the periods in which the changes occur. The Company presents employee benefit obligations as current liabilities in the statement of financial position if the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period, irrespective of when the actual settlement is expected to take place.

Short-term employee benefits

Short-term employee benefits are benefits, other than termination benefits, that are expected to be settled wholly within twelve (12) months after the end of the period in which the employees render the related service. Examples of such benefits include wages and salaries, non-monetary benefits and accumulated sick leave. Short-term employee benefits are measured at the undiscounted amounts expected to be paid when the liabilities are settled. There are no employee-benefit expenses recognised within cost of sales.

Share-based payment transactions

The grant-date fair value of share-based payment awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period that the employees unconditionally become entitled to the awards. The amount recognised as an expense is adjusted to

reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognised as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

(v) Inventories

Inventories are valued at the lower of cost and net realisable value. Costs incurred in bringing each product to its present location and condition are accounted for, as follows:

- Raw materials: average cost; and
- Finished goods and work in progress: cost of direct materials and manufacturing charges from contract manufacturer.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

(w) Significant accounting judgements, estimates and assumptions

The preparation of the Company's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods. The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Company based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Company. Such changes are reflected in the assumptions when they occur.

Share-based payments

The Company initially measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value for share-based payment transactions requires determination of the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determination of the most appropriate inputs to the valuation model including the expected life of the share option, volatility and dividend yield and making assumptions about them. The assumptions and models used for estimating fair value for share-based payment transactions are disclosed in Note 17.

Fair value of financial instruments

When the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the discounted cash flow (DCF), Black-Scholes option pricing models and Monte Carlo option valuation model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. The assessed fair values of the embedded derivatives were determined using a Black-Scholes option pricing model which approximates the results that would have been achieved by using a binomial lattice. The model considers the expected price, volatility of the underlying instrument, expected dividend yield and the risk-free interest rate. Changes in assumptions in relation to these factors could affect the reported fair value of financial instruments. See Note 23(f) for further disclosures.

Intangible assets

The Company assesses at initial recognition whether an internally developed asset has met the recognition requirements established in AASB 138 and measures the direct and indirect costs of development using several estimates and assumptions. After capitalisation, management monitors whether the recognition requirements continue to be met and whether there are any indicators that capitalised costs may be impaired. For assets not yet ready for use, management estimate the fair value less costs of disposal (FVLCD). To estimate the FVLCD, management applies the cost replacement model whereby an estimate is made of all costs required in current market conditions to produce a similar product. With respect to ready for use assets, management assesses whether impairment indicators exist in accordance with AASB 136. In the instance where indicators of impairment exist, management estimates the recoverable amount of each asset or cash-generating unit based on expected future cash flows and uses an interest rate to discount them. Estimation uncertainty relates to assumptions about future operating results, the determination of a suitable discount rate, and the appropriate classification of cash generating units. See Note 12 for further disclosures.

(x) Going Concern

These financial statements have been prepared based on the going concern basis of accounting which contemplates the continuity of normal business activities and the realisation of assets and settlement of liabilities in the ordinary course of business.

The Group incurred a loss after tax attributable to members of \$2,950,943 (2022: \$3,360,271). The Group incurred negative cash flows from operations and investing activities of \$1,490,140 for the year ended 30 June 2023 (2022: \$(1,926,395)). Furthermore, this is the first year in which the Group has reported negative net assets of \$983,136 (2022: positive net assets of 1,575,683).

The Group has current assets of \$2,472,407 (2022: \$3,295,871) which exceed current liabilities of \$1,288,138 (2022: \$1,113,301).

The Directors believe that it is reasonably foreseeable that the Group will continue as a going concern and be able to pay its debts as and when they fall due after consideration of the following mitigating matters:

- the Group has performed a cash flow forecast and determined that it has or will have access to adequate cash resources to fund its operations for at least 12 months from the date of approval of these financial statements;
- the Group expects to have continued access to working capital facilities to support cash needs and expected growth in revenues;

- the Group, if required, has the ability to raise additional funds on a timely basis pursuant to the Corporations Act 2001 and ASX Listing Rules and the Directors believe the Group would be able to continue to source equity or alternative funding if required; and
- the Group expects to successfully convert current commercialisation efforts to future revenue and cash receipts to support the fixed base of expenditures.

Should the above not eventuate or are not able to be resolved in the Group's favour, then there will be a material uncertainty regarding the ability of the Group to continue as a going concern and pay its debts and obligations as and when they become due and payable. Therefore, the Company is evaluating strategies to obtain the required additional funding for future operations in the event the projected revenue do not materialise. These strategies may include, but are not limited to, obtaining equity financing, issuing debt or entering into other financing arrangements, and restructuring of operations to grow revenues and decrease expenses.

If the Group is unable to continue as a going concern, it may be required to realise its assets and extinguish its liabilities other than in the normal course of business at amounts different from those stated in the financial report. These financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or to the amounts and classifications of liabilities that might be necessary should the Group not continue as a going concern.

3. REVENUE & OTHER INCOME

	2023	2022
Sale of goods - point in time	7,210,574	8,174,937
Interest earned	12,571	2,182

All revenue from the sale of goods is derived from the Company's operations in the US.

4. ADMINISTRATIVE EXPENSES

	2023	2022
Employee benefits expense	2,311,965	1,988,709
Post-employment benefits - defined contribution	79,809	12,515
Professional fees	375,429	533,356
Other administrative expenses	149,218	160,286
Occupancy	90,065	87,722
Depreciation	363,172	370,226
Insurance expenses	238,323	213,052
Total	3,607,981	3,365,866

5. RESEARCH AND DEVELOPMENT COSTS

	2023	2022
Research and development costs	329,519	501,156
Amortisation	301,065	676,357
Total	630,584	1,177,513

6. AUDITOR'S REMUNERATION

	2023	2022
Amount received or due and receivable by Grant Thornton Australia for:		
(a) an audit or review of the financial report of the Company	109,732	114,588
Total auditor's remuneration	109,732	114,588

7. TAXATION

TAXATION				2023		2022	
(a) Income tax recognised in profit and loss							
Profit /(loss) before tax				(2,950,943)		(3,360,271)	
Prima facie tax on operating loss before income tax at 30.0%				(885,283)		(1,008,082)	
Temporary differences not recognised				(27,931)		382,712	
Tax effect of permanent differences:							
Other				153,977		(81,821)	
Interest				249,914		199,594	
Fair value movement				(238,841)		(214,946)	
Differences in jurisdictional tax rates				134,623		225,956	
Difference in foreign exchange rates				78,301		-	
Tax losses not brought to account				535,240		496,587	
Income tax benefit attributable to reversal of deferred tax liability on intangible assets				-		-	
(b) Deferred tax assets							
Deferred tax assets at 30 June brought to account:							
Accrued and prepaid expenses				69,067		43,584	
Expenses deducted over 5 years				3,618		-	
Fixed assets				36,701		15,921	
263A costs				588		2,383	
Other				76,174		90,433	
Income tax losses				393,451		159,880	
Total				579,599		312,201	
(c) Deferred tax liability							
Unrealised FX				382,493		-	
Basis difference on fixed assets				197,106		312,201	
Total				579,599		312,201	
(d) Net deferred tax position							
Deferred tax assets				579,599		312,201	
Deferred tax liabilities				579,599		312,201	
Net deferred tax position				-		-	
(e) Deferred tax assets not recognised							
Unrealised FX				-		127,950	
Accrued and prepaid expenses				-		20,764	
Expenses deducted over 5 years				-		5,178	
Borrowing Costs				-		245	
Income tax losses				12,833,625		12,767,528	
Net deferred tax position				12,833,625		12,921,665	
(f) Net deferred tax position by region							
	2023			2022			
	AUS	US	Total	AUS	US	Total	
Deferred tax assets	382,493	197,106	579,599	-	312,201	312,201	
Deferred tax liabilities	382,493	197,106	579,599	-	312,201	312,201	
Net deferred tax position	-	-	-	-	-	-	
Income tax losses not recognised	13,009,676	62,269,787	75,279,463	12,953,490	60,389,091	73,342,581	

No income tax is payable by the Company. The Directors have considered it prudent not to bring to account the future income tax benefit of income tax losses until it is probable of deriving assessable income of a nature and amount to enable such benefit to be realised. The Company has estimated unrecouped income tax losses of \$75,279,463 (2022: \$73,342,581) which may be available to offset against taxable income in future years. The benefit of these losses and timing differences will only be obtained if there is sufficient probability that taxable profits will be generated by the Company in future periods. Deferred tax assets and liabilities which relate to income taxes levied by the same taxation authority are offset where the Company intends to settle those tax assets and liabilities on a net basis.

8. EARNINGS PER SHARE

Classification of securities as ordinary shares

The Company has only one category of ordinary shares included in basic earnings per share.

Classification of securities as potential ordinary shares

There are currently no securities to be classified as dilutive potential ordinary shares on issue.

	2023	2022
Weighted average number of ordinary shares	646,905,991	642,892,460
Basic loss (\$)	(2,950,943)	(3,360,271)
Basic / Diluted loss per share (cents)	(0.46)	(0.52)

9. TRADE AND OTHER RECEIVABLES

	2023	2022
Trade receivables	1,032,870	567,940
Other receivables	14,080	11,112
Total	1,046,950	579,052

All amounts are short-term. The company does not recognise any expected credit losses based on an assessment of historic recoveries and trend. The net carrying value of trade receivables is considered a reasonable approximation of fair value. The receivables are secured as collateral in the Alterna Capital Solutions line of credit (see Note 15 - Borrowings).

10. INVENTORIES

	2023	2022
Raw materials - at cost	452,873	762,977
Finished goods - at cost	425,172	957,956
Provision for obsolescence	(53,064)	(121,713)
Total	824,981	1,599,220

During the current year, inventories of \$4,388,973 (2022: \$4,845,222) were recognised as an expense and included in Cost of Sales. The inventory is secured as collateral in the Alterna Capital Solutions line of credit (see Note 15 - Borrowings).

11. PROPERTY, PLANT AND EQUIPMENT

Cost	Furniture and equipment	Right-of-use equipment	Right-of-use building	Total
Balance at 30 June 2021	2,323,667	319,677	902,952	3,546,296
Additions	11,851	-	-	11,851
Disposals	(30,296)	-	-	(30,296)
Transfers ⁽¹⁾	319,677	(319,677)	-	-
Balance at 30 June 2022	2,624,899	-	902,952	3,527,851
Additions	17,503	-	-	17,503
Disposals	(28,905)	-	-	(28,905)
Balance at 30 June 2023	2,613,497	-	902,952	3,516,449

Depreciation and impairment

Balance at 30 June 2021	1,267,887	157,625	218,898	1,644,410
Depreciation	219,253	41,525	109,448	370,226
Disposals	(28,980)	-	-	(28,980)
Transfers ⁽¹⁾	199,150	(199,150)	-	-
Balance at 30 June 2022	1,657,310	-	328,346	1,985,656
Depreciation	253,723	-	109,449	363,172
Disposals	(28,066)	-	-	(28,066)
Balance at 30 June 2023	1,882,967	-	437,795	2,320,762

Net book value

at 30 June 2021	1,055,780	162,052	684,054	1,901,886
at 30 June 2022	967,589	-	574,606	1,542,195
at 30 June 2023	730,530	-	465,157	1,195,687

⁽¹⁾ Transfers consist of leased assets for which the underlying lease was paid in full. The assets and related Accumulated Depreciation were transferred out of the Right of Use category into owned assets (Furniture and equipment).

12. INTANGIBLE ASSETS

Cost	Capitalised development costs
Balance at 30 June 2021	3,558,588
Additions	310,490
Balance at 30 June 2022	3,869,078
Additions	428,129
Balance at 30 June 2023	4,297,207
Amortisation and impairment	
Balance at 30 June 2021	597,177
Amortisation	676,357
Impairment	1,026,377
Balance at 30 June 2022	2,299,911
Amortisation	301,931
Balance at 30 June 2023	2,601,842
Net book value	
at 30 June 2021	2,961,411
at 30 June 2022	1,569,167
at 30 June 2023	1,695,365

Impairment testing for intangible assets

Assets not ready for use

Intangible assets not ready for use are tested for impairment annually. An asset is impaired when the carrying amount exceeds the recoverable amount. When this occurs, an impairment loss is recognised for the amount by which the carrying amount of an asset exceeds its recoverable amount. To determine recoverable amount, management has used a fair value less costs of disposal approach. The fair value has been calculated using a replacement costs approach.

No impairment loss has been recognised for the current reporting period. In the previous reporting period, an impairment loss of \$1,026,377 was recognised against two product lines after the Company identified indicators of impairment and performed a recoverable value assessment based on a Relief from Royalty Method (RRM model).

Assets ready for use

For assets ready for use and being amortised, management has assessed for indicators of impairment, which include considerations of external and internal sources of information. Based on our assessment, no indicators of impairment were identified.

13. TRADE AND OTHER PAYABLES

	2023	2022
Trade payables	573,623	407,530
Other payables	408,291	402,496
Interest payable	8,382	6,395
Total	990,296	816,423

All amounts are short-term. The carrying values of trade payables and short-term bank overdrafts are a reasonable approximation of fair value.

14. LEASE LIABILITIES

	2023	2022
Lease payments during the period:		
Principal payments	118,253	94,258
Interest	77,820	90,107
Variable lease payments not included in measurement of lease liability	35,432	34,124
Total	231,505	218,489
Minimum future rental payments under non-cancellable leases:		
Current	201,843	195,815
Non-current	704,487	906,330
Total	906,330	1,102,145
Present value of future minimum rental payments under leases:		
Lease liability - current	136,498	118,253
Present value of lease liability - non-current	600,774	737,273
Total	737,272	855,526

The Company leases its corporate office which includes laboratories and a warehouse under one agreement. This facility is used for administration, research and operational activities and has a remaining lease term of 4.25 years. Where a right to control an asset specified in a lease agreement exists, the Company recognises a right-of-use asset, representing its right to use the underlying leased asset, and a lease liability representing its obligation to make lease payments. Lease liabilities are recognised similarly to financial liabilities with cash repayments recorded into a principal portion and an interest portion and presents them as such in the statement of cash flows. Assets and liabilities arising from a lease are initially measured on a present value basis. The measurement includes non-variable lease payments expected to be incurred for the term of the lease. The term of the lease is determined by reference to non-cancellable periods and those periods subject to exercise of an option, where that option is considered reasonably certain to be exercised.

15. BORROWINGS

	2023	2022
Current Borrowings:		
Line of credit	161,345	178,626
Total	161,345	178,626
Non-current borrowings:		
Convertible note carrying value	3,505,070	2,715,620
Accrued interest	282,119	99,575
Total	3,787,189	2,815,195

(a) Convertible note

On 28 December 2022, the Company amended and restated its existing convertible note with an existing shareholder. The proceeds from the amended funding were first used to pay down the original loan facility which was due to expire on 24 December 2023 and carried a face value of \$3.5M (A\$5.1M) plus accrued interest of \$0.2M (A\$0.4M). In conjunction with this amendment, the shareholder agreed to provide an additional \$1.0M (A\$1.5M) to support the business through the next phase of its growth and development. The restated note has a face value of \$4.8M (A\$7.0M), a three-year term and a 10.0% annual interest rate with coupon interest payments due quarterly. The Company may elect to defer interest payments in exchange for an additional 2% in interest payable to the lender. The note is convertible into ordinary shares at the holder's discretion and with shareholder approval at a conversion price of A\$0.03/share.

The previously and newly issued convertible notes are considered hybrid instruments with host and derivative liability components. When initially recorded, the derivative is measured at fair value and separated from the host liability (also refer to Note 16).

The change in terms of the amended and restated debt was considered significant and, as such, the Company treated the transaction as a substantial modification of an existing arrangement and thus the previously issued convertible note (along with the derivative liability component) was considered extinguished and derecognised from the financial statements. The newly issued convertible note was measured initially at fair value and then subsequently at amortised cost in accordance with AASB 9. The difference in values of the extinguished debt and newly issued convertible note has been recognised as a loss through profit or loss.

	2023	2022
(Loss) on debt extinguishment	(576,374)	-

The convertible notes have been measured at amortised cost in accordance with AASB 9. The Company allocates interest payments over the term of the borrowings at a constant rate on the carrying value. The carrying balance over the remaining life of the facility will increase to the principal balance.

	2023	2022
Convertible note carrying value	3,505,070	2,715,620
Remaining amortisation of effective interest	1,223,661	895,946
Foreign currency exchange rate impact	(87,731)	(62,562)
Principal balance outstanding	4,641,000	3,549,004

(b) Line of Credit

The Company entered into a three-year line of credit agreement on 05 Apr 2022 with Alterna Capital Solutions to provide working capital funding. The facility is a three-year \$3.0M asset-based facility which can be increased to \$5.0M with the approval of the lender. The borrowing base of the line of credit consists of 90% of eligible accounts receivable plus a calculated portion of inventory which, among other factors, will not exceed 50% of eligible inventory.

The fund usage interest rate at execution of the agreement was 8.25% and adjusts with upward changes in the Wall Street Journal Prime Rate. The applicable interest rate at 30 June 2023 was 13.25%.

Costs incurred to obtain financing are deferred and amortised on a straight-line basis over the term of the financing facility. The unamortised deferred financing costs are shown as a reduction of the carrying value of the related debt. The amortisation expense was \$19,256 (2022: \$4,814) and is included in interest expense.

	2023	2022
Line of credit liability	195,043	231,580
Unamortised deferred financing costs	(33,698)	(52,954)
Net carrying value of line of credit	161,345	178,626

16. DERIVATIVE LIABILITY

The current and previous convertible notes are considered hybrid instruments with host and derivative liability components. When initially recorded, the derivative is measured at fair value and separated from the host liability. Subsequently, changes in value are recorded in profit or loss upon revaluation.

	2023	2022
Derivative liability	688,364	182,452

On extinguishment of the previously issued convertible note (see Note 15), the derivative liability component was also derecognised. Therefore, the gain on embedded derivative in profit and loss included both the gain on revaluation of the derivative liability during the period and the gain on the derecognition of the derivative related to the old convertible note.

	2023	2022
Gain on embedded derivative due to changes in fair valuation	753,995	688,060
Gain on embedded derivative due to derecognition of convertible note	40,102	-
Total Gain/(Loss) on embedded derivative	794,097	688,060

The fair value of the derivative liability has been valued using a Black-Scholes option pricing model which approximates a Monte Carlo binomial lattice simulation. Pricing model inputs of the current derivative include spot price (A\$0.013), risk-free rate (4.14%), remaining term (3 years) and volatility (89.07%).

17. CONTRIBUTED EQUITY

	2023 Shares	2022 Shares	2023 \$	2022 \$
(a) Issued capital				
Ordinary shares fully paid	651,389,760	645,256,590	66,610,771	66,523,851
(b) Movement in share capital				
Balance at 01 July	645,256,590	640,197,246	66,523,851	66,265,398
Costs of capital raising	-	-	(1,906)	(4,284)
Performance rights exercised	270,482	915,625	9,076	79,907
Shares issued in lieu of directors' fees	5,862,688	810,386	79,750	38,250
Shares issued in lieu of professional services	-	3,333,333	-	144,580
Balance at 30 June	651,389,760	645,256,590	66,610,771	66,523,851
(c) Movements in performance rights				
Balance at 01 July	270,482	915,625	9,076	79,907
Exercised	(270,482)	(915,625)	(9,076)	(79,907)
Vested - not Issued at 01 July	-	310,451	-	10,417
Forfeited	-	(39,969)	-	(1,341)
Balance at 30 June	-	270,482	-	9,076

(d) Share appreciation rights ("SAR")

	Grant Date	Vesting Date	Expiry Date	Opening Price (AUD)	Fully Vested Target Price (AUD)	FV at Grant (AUD)	Open Balance	Granted	Forfeited	Outstanding
FY23	23-Sep-22	23-Sep-25	23-Sep-27	0.020	0.171	0.0048	-	5,160,838	(872,564)	4,288,274
FY23-ELT	16-Nov-22	23-Sep-25	23-Sep-27	0.030	0.171	0.0046	-	18,690,988	-	18,690,988
CEO Award	16-Nov-22	Various	23-Sep-27	0.030	0.150	0.0056	-	16,131,415	-	16,131,415
FY22	23-Sep-21	23-Sep-24	23-Sep-26	0.076	0.148	0.0380	18,300,511	-	(3,046,795)	15,253,716
FY21	23-Sep-20	23-Sep-23	23-Sep-25	0.071	0.139	0.0320	14,610,268	-	(1,700,225)	12,910,043
Total							32,910,779	39,983,241	(5,619,584)	67,274,436

At the discretion of the Board, the Company may make offers and issue share appreciation rights (SARs) to eligible individuals under the Plan. Unless the Board determines otherwise, the award is calculated by multiplying a defined percentage by the fixed component of compensation.

The objective of the plan is to:

- provide an incentive and to reward, retain and motivate participants;
- recognise the abilities, efforts, and contributions of participants to the performance and success of the Group; and
- provide participants with the opportunity to acquire or increase their ownership interest in the Group.

Vested Rights:

- Participants are entitled to the amount by which the closing share price exceeds the opening share price.
- Shares will be issued in the amount equal to the closing share price less opening share price divided by closing share price then multiplied by the vested and exercised SARs. Closing price is defined as the 20-day volume weighted average price ("VWAP") as at the vesting date of the relevant SAR.

Vesting Conditions:

The Board sets the vesting conditions for each SAR plan year using the following as general guidelines.

- The Board sets the Fully Vested Target Price by applying a compounded annual growth rate ("CAGR") on the opening share price for the term of the relevant SAR. The opening price is the 20-day VWAP from the issuance date of the annual report or as set by the Board. Partial vesting will begin at the approved minimum CAGR at an approved percentage of the total SAR grants. Vesting from the minimum CAGR to the fully vested CAGR (i.e., Fully Vested Target Price) will occur on a linear scale between the minimum percentage of the total SAR grants and 100% of the total SAR grants.
- Continued employment through the vesting date.

(e) Movements in share options

	Grant date	Exercise price	Expiry date	Balance at start of year	Granted	Exercised	Expired	Balance at end of year
Warrants								
2023	31-Dec-19	\$0.06	29-Mar-23	3,829,787	-	-	(3,829,787)	-
2022	31-Dec-19	\$0.06	29-Mar-23	3,829,787	-	-	-	3,829,787

(f) Details of share options

	2023			2022		
	Number	WAEP ¹	WARCL ²	Number	WAEP	WARCL
Outstanding at 01 July	3,829,787	0.06	0.75	3,829,787	0.06	0.75
Expired	(3,829,787)	(0.06)	(0.75)	-	-	-
Outstanding at 30 June	-	-	-	3,829,787	0.06	1.75

¹Weighted average exercise price

²Weighted average remaining contractual life

	2023			2022		
	Number	Average fair value per option	\$	Number	Average fair value per option	\$
Warrants	-	-	-	3,829,787	0.001	4,093

(g) Terms and conditions of contributed equity

Holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at shareholders' meetings. In the event of winding up of the Company, ordinary shareholders rank after all other shareholders and creditors and are fully entitled to any proceeds of liquidation.

(h) Capital management

The Company's objectives in managing capital are to safeguard the Company's ability to continue as a going concern, so that it can continue to provide returns to shareholders and benefits for the stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

18. SHARE-BASED PAYMENTS

The following is the summary of movements in share-based payments along with the amounts expensed during the year:

	2023		2022	
	Number	\$	Number	\$
Shares in lieu of salary ⁽¹⁾	5,862,688	82,000	810,386	11,250
Shares to be issued in lieu of salary	6,867,372	79,750	-	-
Performance rights issued	270,482	-	-	-
Performance rights vested but not issued	-	-	270,482	9,076
Professional services ⁽²⁾	-	48,193	3,333,333	96,387
Total	13,000,542	209,943	4,414,201	116,713

⁽¹⁾ The total value of the FY22 share-based payments of 810,386 shares is \$38,250, of which \$11,250 was expensed in FY22 and \$24,750 was expensed in FY21 for 445,850 shares that were in the 'shares to be issued' status as of the previous reporting period. The remaining \$2,250 was included in prepayments as of the end of FY22 and expensed in FY23 as it was earned.

⁽²⁾ Of the 3,333,333 shares issued in FY22 with a total value of \$144,580, \$96,387 was expensed in FY22 with the remaining balance of \$48,193 remaining in prepayments as at the prior reporting date. This balance of \$48,193 has been expensed in FY23.

In addition to the above table, share appreciation rights expensed during the year were \$116,322 (2022: \$293,799). See Note 17 for plan details.

19. NOTES TO THE STATEMENT OF CASH FLOWS

(a) Cash and cash equivalents	2023	2022
Cash on hand	513,277	1,027,095
(b) Reconciliation of operating loss after income tax to net cash used in operating activities		
Operating loss after income tax	(2,950,944)	(3,360,271)
Non-cash items:		
Depreciation, amortisation and impairment of non-current assets	664,237	2,072,960
Share-based payment	326,266	406,008
Amortisation on borrowings	401,901	432,888
(Gain) on fair value movement- embedded derivative	(794,098)	(688,060)
Loss on debt extinguishment	576,374	-
Loss on disposal of assets	839	1,316
Interest Expense Accrued Not Paid	184,531	67,207
Changes in assets and liabilities net of effect of purchase of subsidiaries:		
(Increase) / Decrease in trade and other receivables	(467,898)	788,540
(Increase) / Decrease in inventories on hand	774,239	(375,130)
(Increase) / Decrease in other current assets	3,305	(15,661)
Increase / (Decrease) in trade and other payables	159,405	(938,408)
Increase / (Decrease) in other current liabilities	18,245	37,033
Net cash (used in) operating activities	(1,103,598)	(1,571,578)

20. RELATED PARTY TRANSACTIONS AND BALANCES

The Company's related parties include key management personnel and Colinton Capital Partners, a related party of Simon Moore, Non-Executive Director with whom the Company has an outstanding convertible note.

Transactions and outstanding balances with Colinton Capital Partners in conjunction with the convertible note:

	2023	2022
Interest expense on convertible note	430,876	240,875
Convertible note carrying value ⁽¹⁾	3,505,070	2,715,620
Accrued interest	282,119	99,575

⁽¹⁾ See Note 15 for more details

Key management personnel remuneration (see additional details in the Remuneration Report) includes the following expenses:

	2023	2022
Short-term employee benefits:		
Salaries	1,037,375	909,725
Non-monetary benefits	54,934	27,332
Short-term incentives	30,000	-
	1,122,309	937,057
Post-employment benefits - defined contribution retirement plans	33,950	9,088
Share-based compensation	308,047	255,916
Total remuneration	1,464,306	1,202,061

21. SEGMENT REPORTING

The financial results from this segment are equivalent to the financial statements of the Company as a whole. Geographic information of revenue and non-current assets excluding financial instruments are as follows:

2023	Australia	US	Total
Revenue	-	7,210,574	7,210,574
Interest earned	8,157	4,414	12,571
Depreciation, amortisation and impairment expenses	-	664,237	664,237
Interest expense	832,777	150,379	983,155
Property, plant and equipment	-	730,530	730,530
Right of use asset	-	465,157	465,157
Intangible assets	-	1,695,365	1,695,365

2022	Australia	US	Total
Revenue	-	8,174,937	8,174,937
Interest earned	1,924	258	2,182
Depreciation, amortisation and impairment expenses	-	2,072,960	2,072,960
Interest expense	673,763	102,279	776,042
Property, plant and equipment	-	967,589	967,589
Right of use asset	-	574,606	574,606
Intangible assets	-	1,569,167	1,569,167

22. INVESTMENTS IN CONTROLLED ENTITIES

	Country of Incorporation	Percentage Owned (ordinary shares)	
		2023	2022
Parent Entity			
Alexium International Group Limited	Australia	-	-
Subsidiaries of Alexium International Group Limited			
Alexium Inc.	USA	100	100

The parent entity has an interest free intercompany receivable from Alexium Inc. amounting to \$43,361,535 (2022: \$42,986,745).

Alexium Limited, a Cyprus entity, was formed to hold intellectual property rights. The Company decided that it was not cost effective to maintain this entity and voluntarily started the dissolution process and recorded all entries regarding the closing in the prior annual report. The company was officially dissolved 11 June 2022.

23. FINANCIAL INSTRUMENTS

(a) Interest rate risk exposures

The Company is exposed to interest rate risk through primary financial assets and liabilities. The carrying amounts of financial assets and financial liabilities held at balance date approximate their estimated net fair values and are given below. The net fair value of a financial asset or a financial liability is the amount at which the asset could be exchanged, or liability settled in a current transaction between willing parties after allowing for transaction costs.

The Company's exposure to interest rate risk and the effective weighted average interest rate for classes of financial assets and financial liabilities:

	Weighted average effective interest rate %	Variable interest rate \$	Fixed Maturity Dates			Non- interest bearing \$	Total \$
			< 1 Year \$	1-5 Years \$	5+ years \$		
2023							
Financial Assets							
Cash and cash equivalents	3.14	513,277	-	-	-	-	513,277
Trade and other receivables/other financial assets	-	-	-	-	-	1,046,950	1,046,950
Total Financial Assets	-	513,277	-	-	-	1,046,950	1,560,227
Financial Liabilities							
Trade and other payables	-	-	-	-	-	990,296	990,296
Line of Credit	12.30	-	161,345	-	-	-	161,345
Lease liabilities	9.66	-	201,844	704,487	-	-	906,331
Convertible note	10.63	-	-	4,771,480	-	-	4,771,480
Derivative liability	-	-	-	688,364	-	-	688,364
Total Financial Liabilities	-	-	363,189	6,164,331	-	990,296	7,517,816
2022							
Financial Assets							
Cash and cash equivalents	0.48	1,027,095	-	-	-	-	1,027,095
Trade and other receivables/other financial assets	-	-	-	-	-	579,052	579,052
Total Financial Assets	-	1,027,095	-	-	-	579,052	1,606,147
Financial Liabilities							
Trade and other payables	-	-	-	-	-	816,422	816,422
Line of Credit	9.20	-	178,626	-	-	-	178,626
Lease liabilities	9.66	-	195,815	849,800	56,530	-	1,102,145
Convertible note	6.34	-	-	3,549,004	-	-	3,549,004
Derivative liability	-	-	-	182,452	-	-	182,452
Total Financial Liabilities	-	-	374,441	4,581,256	56,530	816,422	5,828,649

(b) Interest rate risk

At the reporting period end date, if interest rates had increased by 1% from the year end variable rates with all other variables held constant, after-tax profit and equity for the Company would have decreased by \$5,133 (2022: \$10,271) based on cash and cash equivalents. The 1% sensitivity is based on reasonable possible changes using an observed range of historical interest rate movements.

(c) Foreign currency risk

A large proportion of the Company's revenues, cash inflows, other expenses, capital expenditure and commitments are denominated in US dollars with smaller, less frequent transactions in Australian dollars. Exposure to foreign exchange risk may result in the fair value of future cash flows of a financial instrument fluctuating due to movement in foreign exchange rates of currencies in which the Company holds financial instruments which are other than the US dollar reporting currency. With instruments being held by overseas operations, fluctuations in the Australian dollar may impact the Company's financial results.

(d) Credit risk

Credit risk arises from the Company's financial assets which is comprised of trade receivables. The Company's exposure to credit risk arises from potential default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments. The Company does not hold any credit derivatives to offset its credit exposure. The Company's exposure to credit risk is minimal. However, to the extent the Company has borrowed against the receivables in conjunction with its line of credit agreement with Alterna Capital, the lender provides credit insurance against the eligible collateral which provides some additional mitigation of credit risk. Total bad debt expense for the year was Nil (2022 Nil). The Company does not currently have any significant debtors, lending, stock levels or any other credit risk, and, therefore, a formal credit risk management policy is not maintained.

(e) Liquidity risk

The Company manages liquidity risk by continuously monitoring scheduled debt servicing payments for long-term financial liabilities as well as forecasted cash inflows and outflows due in day-to-day business. Liquidity needs are monitored in various time bands, on a day-to-day basis, as well as based on a rolling 30-day projection. Long-term liquidity needs for a 180-day and 360-day period are identified monthly. Net cash requirements are compared to available borrowing facilities to determine headroom or shortfalls.

The Company's non-derivative financial liabilities have contractual maturities as summarised below:

	Current	1-5 Years	5+ years
2023			
Trade and other payables	990,296	-	-
Lease liabilities	201,844	704,487	-
Borrowings	161,345	4,923,119	-
Statement of financial position exposure	1,353,485	5,627,606	-
2022			
Trade and other payables	816,422	-	-
Lease liabilities	195,815	849,800	56,530
Borrowings	178,626	3,648,579	-
Statement of financial position exposure	1,190,863	4,498,379	56,530

(f) Fair values of financial assets and liabilities

Cash and cash equivalents

The carrying amount approximates fair value because of their short-term to maturity.

Trade receivables and trade creditors

The carrying amount approximates fair value.

Financial assets and financial liabilities measured at fair value in the statement of financial position are grouped into three levels of a fair value hierarchy. The three levels are defined based on the observability of significant inputs to the measurement, as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: unobservable inputs for the asset or liability.

There were no other financial assets and liabilities other than cash, trade receivables and payables, leases, and borrowings at the close of the reporting periods.

Measurement of fair value of financial instruments

The Company's finance team performs valuations of financial items for financial reporting purposes, including Level 3 fair values, in consultation with third party valuation specialists for complex valuations. Valuation techniques are selected based on the characteristics of each instrument, with the overall objective of maximising the use of market-based information. Valuation processes and fair value changes are discussed among the audit committee and the valuation team at least every year.

Embedded derivatives (Level 3)

The assessed fair values of the derivatives were determined using a Black-Scholes option pricing model. The model considers the expected price, volatility of the underlying instrument, expected dividend yield and the risk-free interest rate. The three-year share price history has been used to determine the expected price volatility. Pricing model inputs of the current derivative include spot price (A\$0.013), risk-free rate (4.14%), remaining term (3 years) and volatility (89.07%). The embedded derivative liability is classified as non-current based on a convertible note maturity of three years. The following shows the levels within the hierarchy of financial assets and liabilities measured at fair value on a recurring basis:

	Level 1	Level 2	Level 3	Total
2023				
Derivative liability	-	-	688,364	688,364
Statement of financial position exposure	-	-	688,364	688,364
2022				
Derivative liability	-	-	182,452	182,452
Statement of financial position exposure	-	-	182,452	182,452

The following table provides information about the sensitivity of the fair value measurement to changes in the most significant inputs:

Description	Significant unobservable input	Estimate of the input	Sensitivity of the fair value measurement to input
Derivative Liability	Volatility	89%	An increase to 99% (or decrease to 79%) would increase (or decrease) fair value by \$125K

There were no Level 1 or Level 2 transfers in the current and prior reporting periods.

24. PARENT ENTITY INFORMATION

The following details information related to the parent entity, Alexium International Group Limited. The information presented here has been prepared using consistent accounting policies as presented in Note 2.

	2023	2022
Current assets	449,243	410,959
Non-current assets	3,170,941	4,292,745
Total Assets	3,620,184	4,703,704
Current liabilities	127,766	130,374
Long term liabilities	4,475,553	2,997,647
Total liabilities	4,603,319	3,128,021
Total equity	(983,135)	1,575,683
Income (Loss) for the year	7,475,761	(5,358,733)

25. INTEREST EXPENSE

Interest expense recognised for the reporting periods consisted of the following:

	2023	2022
Interest expense for borrowings at amortised cost:		
Convertible note coupon interest	430,876	240,875
Convertible note effective interest amortisation	401,900	432,888
Subtotal	832,776	673,763
Interest Expense-Line of Credit	70,197	11,254
Interest Expense-Capital Lease	77,820	85,693
Interest Expense Other	2,362	5,332
Total Interest Expense	983,155	776,042

26. COMMITMENTS AND CONTINGENCIES

The Company does not have any commitments or contingencies beyond those disclosed in the financial statements or the notes above.

27. DIVIDENDS

No dividend has been declared or paid during the current financial year or the prior financial year. The Company does not have any franking credits available for current or future years as it is not in a tax paying position.

28. SUBSEQUENT EVENTS

There has not arisen any item, transaction, or event of a material and unusual nature, which in the opinion of the Directors of the Company, is likely to significantly affect the operations of the Company, the results of those operations, or the state of affairs of the Company, in future financial years.

The Directors of the Company declare that:

1. The financial statements, comprising the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of financial position, consolidated statement of cash flows, consolidated statement of changes in equity and accompanying notes, are in accordance with the Corporations Act 2001 and:
 - a. comply with Accounting Standards and the Corporations Regulations 2001, other mandatory professional reporting requirements
 - b. give a true and fair view of the Company's financial position as at 30 June 2023 and of its performance for the year ended on that date; and
 - c. comply with International Financial Reporting Standards as disclosed in Note 2 of the financial statements.
2. The remuneration disclosures included in the Directors' Report (as part of the audited Remuneration Report) for the year ended 30 June 2023, comply with section 300A of the Corporations Act 2001 (Cth).
3. In the Directors' opinion, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.
4. The Directors have been given the declarations by the Chief Executive Officer and Chief Financial Officer required by section 295A of the Corporations Act 2001 (Cth).

This declaration is made in accordance with a resolution of the Board of Directors and is signed for and on behalf of the directors by:



Rosheen Garnon

Chair

Dated: 25 August 2023



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Independent Auditor's Report

To the Members of Alexium International Group Limited

Report on the audit of the financial report

Opinion

We have audited the financial report of Alexium International Group Limited (the Company) and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 30 June 2023, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the 2023 then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and the Directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

- a giving a true and fair view of the Group's financial position as at 30 June 2023 and of its performance for the year ended on that date; and
- b complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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Material uncertainty related to going concern

We draw attention to Note 2(x) in the financial statements, which indicates that the Group incurred a net loss after tax of \$2,950,943 and negative cash flows from operating and investing activities of \$1,490,140 for the year ended 30 June 2023, and as of that date, the Group's total liabilities exceeded its total assets by \$983,136. As stated in Note 2(x), these events or conditions, along with other matters as set forth in Note 2(x), indicate that a material uncertainty exists that may cast doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

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

Key audit matter	How our audit addressed the key audit matter
Intangible asset (note 12)	
<p>The Group has capitalised development costs in relation to its ongoing projects. These have a net book value of US\$1,695,365 as at 30 June 2023.</p> <p>In accordance with AASB 136 <i>Impairment of Assets</i>, the Group must determine if impairment indicators exist and test intangible assets for impairment by determining the recoverable amount of assets where indicators of impairment exist.</p> <p>In addition, AASB 136 requires intangible assets not yet available for use to be tested annually for impairment.</p> <p>As a result of the identification of impairment indicators and the presence of intangible assets not yet available for use, management prepared multiple impairment models to estimate the recoverable amounts of these assets.</p> <p>This area is a key audit matter due to the significant management judgement involved in assessing whether impairment indicators exist and determining the recoverable amounts of intangible assets.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> conducting a detailed review of management's assessment of external and internal impairment indicators prepared in accordance with AASB 136, including corroborating and challenging management's assumptions where appropriate; obtaining and evaluating the impairment models against the requirements of AASB 136; evaluating the impairment models against the requirements of AASB 13 <i>Fair Value Measurement</i> where a fair value less costs of disposal approach was applied by management; reviewing management's impairment models by identifying the key inputs and assumptions, obtaining evidence to support those inputs and assumptions, and challenging their validity; performing sensitivity analysis on the key assumptions used in the impairment models; and assessing the adequacy of financial report disclosures

Borrowings and embedded derivative liability (note 15 and note 16)

The Group reached agreement with an existing shareholder to modify the terms of convertible notes during the year. The modifications extended the maturity date, increased the applicable interest rate and increased the principal balance loaned.

The Group must determine the appropriate accounting treatment of the modification of convertible notes in accordance with AASB 9 *Financial Instruments* and AASB 132 *Financial Instruments: Presentation*.

Management assessed that a substantial modification of the terms of the convertible notes occurred and as a result a loss of \$576,374 was recognised upon derecognition of the previously issued convertible notes and recognition of the newly issued convertible notes.

This area is a key audit matter due to the complexity involved in assessing the appropriate accounting treatment and the use of management judgement in interpreting relevant accounting standards.

Our procedures included, amongst others:

- obtaining and reading the deed of amendment to develop an understanding of the key terms and conditions;
- reviewing an accounting paper prepared by a third-party consultant covering the accounting of the amended and restated convertible note;
- assessing the third-party consultant as a management expert in accordance with auditing standards;
- conducting an independent assessment of compliance with accounting standards to ensure the transaction was accounted for in accordance with the requirements of AASB 9 *Financial Instruments* and AASB 132 *Financial Instruments: Presentation*;
- testing the accuracy of calculations supporting the loss on derecognition and the calculation of fair value for the embedded derivative feature of the convertible notes; and
- assessing the adequacy of financial report disclosures.

Information other than the financial report and auditor's report thereon

The Directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 30 June 2023, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

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.

Responsibilities of the Directors for the financial report

The Directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the Corporations Act 2001 and for such internal control as the Directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the Directors are responsible for assessing the Group'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 to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is 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 the Australian Auditing Standards 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 this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: http://www.auasb.gov.au/auditors_responsibilities/ar1_2020.pdf. This description forms part of our auditor's report.

Report on the remuneration report

Opinion on the remuneration report

We have audited the Remuneration Report included in the Directors' report for the year ended 30 June 2023.

In our opinion, the Remuneration Report of Alexium International Group Limited, for the year ended 30 June 2023 complies with section 300A of the *Corporations Act 2001*.

Responsibilities

The Directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.



Grant Thornton Audit Pty Ltd
Chartered Accountants



M R Leivesley
Partner – Audit & Assurance

Sydney, 25 August 2023

The shareholder information set out below was applicable as of 3 August 2023.

Quoted equity securities

651,389,760 fully paid ordinary shares are held by 4,229 shareholders.

Shareholder distribution

The number of shareholders, by size of holding, are:

Holding Range Units	Holders	Total Units	% Issued Share Capital
1 - 1,000	466	173,304	0.03%
1,001 - 5,000	792	2,293,511	0.35%
5,001 - 10,000	658	5,305,846	0.81%
10,001 - 100,000	1,712	63,573,425	9.76%
100,001 - 999,999,999	601	580,043,674	89.05%
	4,229	651,389,760	100.00%

Unmarketable parcels

Holding Range Units	Holders	Total Units	% Issued Share Capital
Minimum parcel A\$500 at \$0.013 per unit	3,016	30,802,720	4.73%

Substantial holders

Rank	Name	Total Units	% Issued Share Capital
1	COLINTON CAPITAL PARTNERS PTY LTD <COLINTON CP FUND 1 (A) A/C>	79,151,331	12.15%
2	SANDHURST TRUSTEES LTD <WENTWORTH WILLIAMSON A/C>	55,188,743	8.47%
3	DR STUART LLOYD PHILLIPS & MRS FIONA JANE PHILLIPS <SL & FJ PHILLIPS PENS F A/C>	43,725,000	6.71%

Voting rights

The voting rights attaching to each class of equity securities are set out below:

- Ordinary shares: On a show of hands every member present at a meeting in person or by proxy shall have one vote and upon a poll each share shall have one vote.
- Options: No voting rights.
- Warrants: No voting rights.

Stock exchange listing

- Quotation has been granted for all the ordinary shares of the company on all Member Exchanges of the Australian Stock Exchange Ltd.

Equity Security Holders

Twenty largest holders of quoted equity securities:

Rank	Name	Total Units	% Issued Share Capital
1	COLINTON CAPITAL PARTNERS PTY LTD <COLINTON CP FUND 1 (A) A/C>	79,151,331	12.15%
2	SANDHURST TRUSTEES LTD <WENTWORTH WILLIAMSON A/C>	55,188,743	8.47%
3	DR STUART LLOYD PHILLIPS & MRS FIONA JANE PHILLIPS <SL & FJ PHILLIPS PENS F A/C>	43,725,000	6.71%
4	DR STUART LLOYD PHILLIPS & MRS FIONA JANE PHILLIPS <SL & FJ PHILLIPS S/F A/C>	30,800,000	4.73%
5	BNP PARIBAS NOMINEES PTY LTD ACF CLEARSTREAM	24,767,436	3.80%
6	DR ELYSE JANE PHILLIPS	10,475,000	1.61%
7	N & G TD PROPRIETARY LIMITED <N & G TD SUPER FUND A/C>	10,000,000	1.54%
7	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED <GSCO CUSTOMERS A/C>	10,000,000	1.54%
8	DUCKY'S LIFELINE PTY LTD <THE R EDWARDS SUPER A/C>	8,320,552	1.28%
9	BNP PARIBAS NOMS PTY LTD <DRP>	8,314,657	1.28%
10	LUCKY POM PTY LIMITED <GRAYSON A/C>	8,000,000	1.23%
11	CITICORP NOMINEES PTY LIMITED	6,644,867	1.02%
12	MABETH PTY LTD	6,000,000	0.92%
13	MR IAN MORTON & MRS DEBORAH MORTON <DEBIAN SUPER FUND A/C>	5,673,285	0.87%
14	MR MARTIN KEITH THOMAS & MRS HELEN PATRICIA THOMAS	5,431,500	0.83%
15	LOMAND SERVICES LIMITED	5,081,500	0.78%
16	D & M MOWBRAY HOLDINGS PTY LTD	5,000,000	0.77%
17	ROSHEEN GARNON	4,676,724	0.72%
18	CANNOW PTY LTD <C & T FAMILY S/FUND A/C>	4,400,000	0.68%
19	MS FRANCES ELIZABETH PHILLIPS & MR STUART LLOYD PHILLIPS <FRANCESPHILLIPSSUPERFND A/C>	3,903,000	0.60%
20	RADELL PTY LIMITED <THE MACKAY FAMILY SUPER A/C>	3,500,000	0.54%