



ALEXIUM

ALEXIUM INTERNATIONAL GROUP LIMITED
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ABN 91 064 820 408

PRESENTED IN US DOLLARS



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COMPANY OVERVIEW





ALEXIUM

Company Overview

"Alexium's value to customers is technology enabling them to create a unique user experience that drives higher sales volumes at improved margins..."

- A performance materials company leveraging proprietary technical innovations to deliver thermal regulation, dehumidification and flame-retardant solutions.
- With 25 global patent applications in the thermal regulation and flame-retardant fields, Alexium delivers value-add innovations for textiles, military and athletic gear, electronics, and construction materials.
- Alexium utilizes contract manufacturing to deliver its technical solutions.
- A pioneer in phase change materials, specializing in innovative composites that offer adaptive thermal management through continuous heat dissipation and dehumidification.



Alexium Management Team (effective September 1, 2022)



Billy Blackburn – Chief Executive Officer/Managing Director

- Accomplished customer-focused executive with over 20 years of leading successful companies within the alternate fuels, specialty chemicals, and high purity solvent markets. Creative visionary with high energy and a steadfast commitment to excellence.
- Experienced in positioning businesses to achieve maximum organizational results in both start-up and growth enterprises. Founded and managed a high growth specialty chemical business specialized in high purity solvents serving pharmaceutical and consumer healthcare markets. Entrepreneurial, Corporate Management and M&A background.



Dr. Bob Brookins – Chief Technology Officer/Executive Director

- Inventor for 20 patents/patent applications and technology leader for the development and commercialization of Alexium's thermal management and flame-retardant product platform
- Involved in multiple facets of the business, including working with customers on product design and marketing, analyzing markets to assess opportunities, and planning for logistics and supply-chain management.



Jason Lewis – Chief Financial Officer

- Worked over 20 years in specialty chemical company for mining, fertilizer, phosphate, and oil/gas industries.
- Established a strong track record of value creation by way of revenue growth through pricing, long-term customer contracts, cost optimization through analysis tools, negotiation of services, department restructuring, debt management and working capital reduction through controls and process improvements. He also has strong international experience including greenfield start-ups.



Alexium Priorities: 3-Year Plan (FY23 - FY25)

- I. Alexium must deliver cash-positive results in the near-term. To do this, the company will focus most of its efforts on delivering revenue from PCM sales to traditional mattress producers
- II. In parallel to the above, Alexium will grow PCM sales to non-traditional mattress producers
- III. To support this, Alexium is implementing a commercial strategy that moves away from emphasizing Alexium brands to selling performance materials that enhance customers' products for thermal and humidity management (comfort)
- IV. The organization will focus technical efforts on integrating these performance materials into customers' products
- V. Contracts will be established that allow Alexium bedding customers to brand the thermal and dehumidifier technologies to differentiate themselves, without shrinking Alexium's addressable market share
- VI. For FR, the company will work across US Military branches, and foreign militaries to offer the newly validated FR NyCo for uniforms. This will be a two-pronged approach to get the government buyers to specify the FR material into their public bids in tandem with having the material approved for manufacturing by the ultimate uniform manufacturers
- VII. While the company executes the above priorities, the R&D group will continue to innovate creating and refining Alexium technologies in support of moving the company into bigger markets such as athletic gear, PPE, electronics, automotive and construction materials

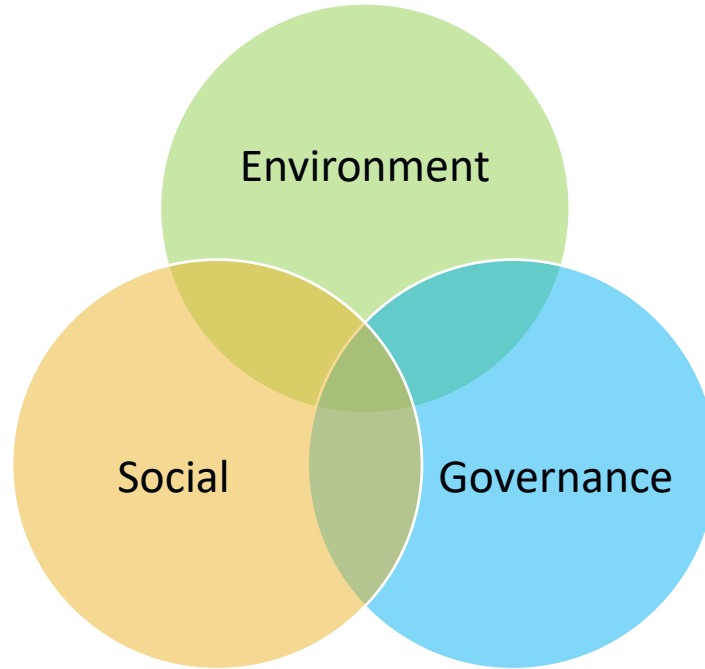
*Priorities I. through V. get Alexium to cash positive. Priorities VI. & VII. allow for sustained profitable growth

Alexium's ESG Commitment



By EOY FY2024, Alexium will Establish baselines, metrics and KPIs for ESG performance:

- ❖ **Environment:** waste reduction, resource conservation, and environmentally friendly products
- ❖ **Social:** qualification-based gender & race pay equality, community investment
- ❖ **Governance:** transparency into corporate integrity, compliance auditing



SUSTAINABLE PRODUCT FOCUS:

Biocool™ | Alexium's proprietary biobased cooling technology for textile & foam applications

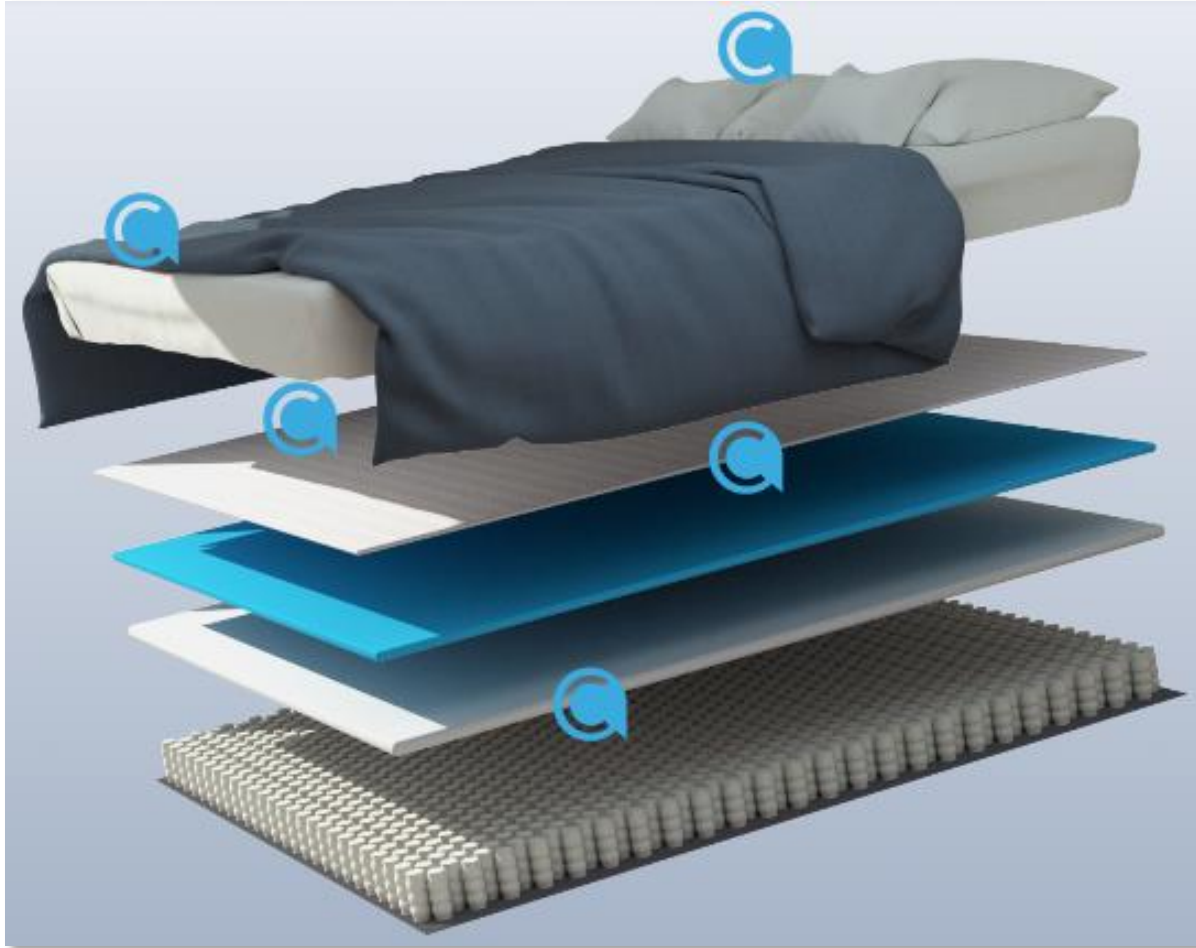
- ✓ Biobased, sustainable raw materials
- ✓ 94% biobased content (highest in market)
- ✓ Registered with the USDA Biopreferred program
- ✓ Certified under the Ecocert COSMOS program

FY2023 GOAL

70% of PCM Sales Utilizing Sustainable & Biobased Materials

Environmental, Social and Governance (ESG) Statement: Alexium is built on a foundation of providing innovative, sustainable, and non-toxic solutions to our commercial partners and 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. Being a leader in innovation comes with the duty to guide our industry to employ higher standards of ethics, social responsibility and corporate governance while continuing to set the framework for environmentally conscious solutions. The board recognizes 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. As we move forward, we will issue policy statements and establish comprehensive reporting to ensure compliance with ESG standards.

Key Market Overview – Bedding



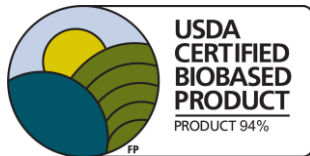
- Since early 2022, the US bedding market has been at a 15 year low due to reduced consumer confidence
- Alexium has managed through this downturn by keeping inventories low, taking a J.I.T manufacturing approach, then shifting our product development focus to the top-of-bed accessory markets. This has ensured customer retention and increased market share, especially for bedding accessories which has shown steady sales while mattress sales remain soft.
- Alexium now has large market share of PCM sales for mattress/textiles which was driven by the successful commercial launch of our Biocool™ product line.
- Alexium is steadily increasing its market share of PCM sales to mattress/foam as we continually improve our wet cake PCM process.
- New products such as Biocool™, Eclipsys™ and DelQ are driving new growth for both bedding accessories and mattresses with new customer products launching in H2 FY2023.

Key Areas of Alexicool®/Biocool™/Eclipsys/DelQ Integration

Alexium's Established Products



- USDA Bio-preferred – 94% biobased content
- Sustainable & affordable
- Can be enhanced with additional additives
- Easy-to-apply, single component solutions
- Application methods: pad, print, roll coat, infusion, screen print and knife-coat



- Alexium's original PCM
- Wash durable, long-lasting performance
- Versatile, flexible finishing technology
- Toxin-free
- Halogen-free
- Offers OEKO-TEX® certified products
- REACH compliant
- Application methods: Pad, Print, Roll coat



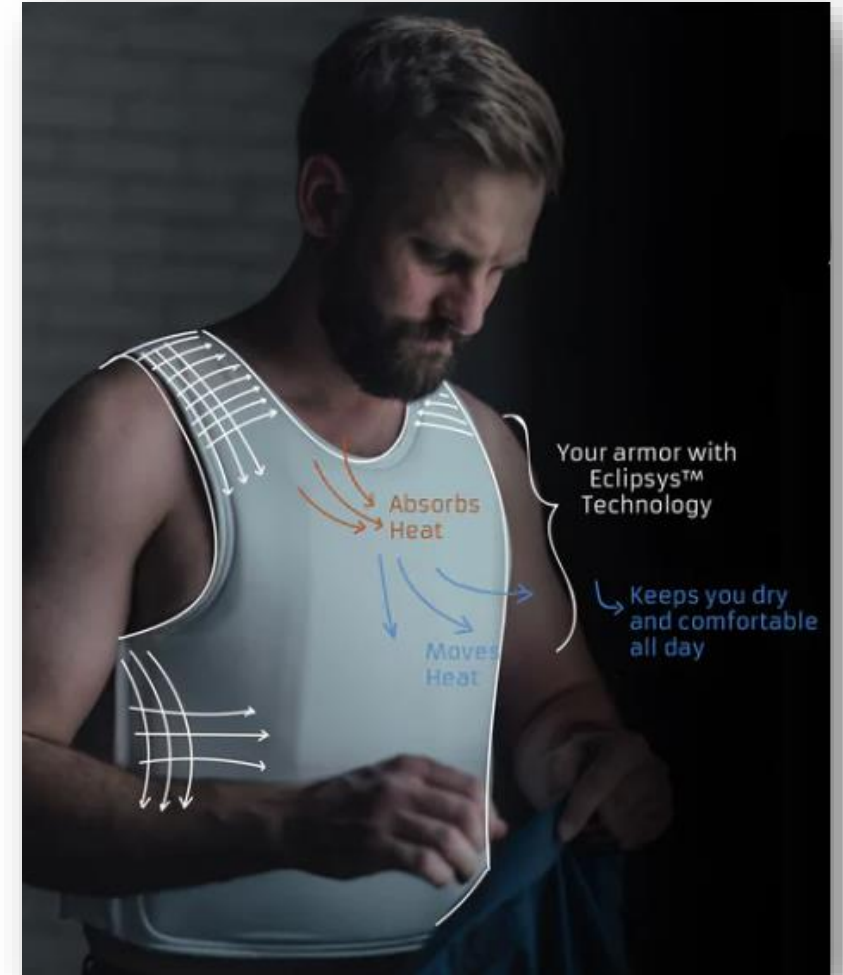
- Customized solutions
- Designed for use in a variety of markets
 - Bedding
 - FR Socks
 - FR Suits (PPE)
 - Military
 - Carpet
- Developing a Non-Formaldehyde FR offering

Product Update – Eclipsys for Tactical Gear

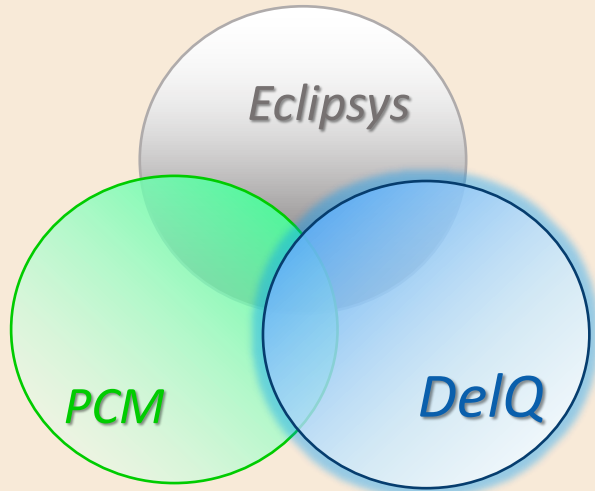


- First large order for Eclipsys on Body Armor in the United States scheduled for delivery in early 2023 (Dept. of Corrections)
- Multiple active customer product development projects ongoing with a global footprint
- Opportunity to retrofit existing Body Armor in addition to supply as a new product
- Increased brand awareness of Eclipsys across the Body Armor market

Areas of ongoing Eclipsys Body Armor business development



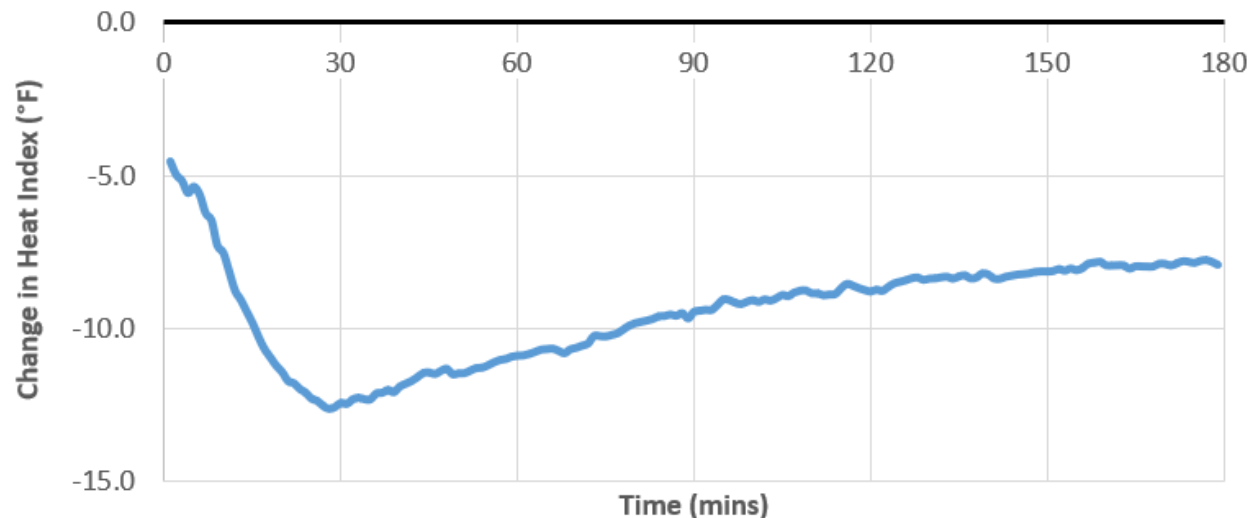
New Product for Thermal Comfort – DelQ



INTRODUCTION TO DelQ

- DelQ is a new technology platform for our thermal management (TM) product portfolio.
- While DelQ is focused on personal thermal comfort like PCM or Eclipsys, the DelQ technology is unique because it provides thermal comfort through humidity management.

Cooling Impact of DelQ Technology (Pillow)



Applicable Markets

- Military/first responder tactical gear
- Sports apparel
- Bedding
- Helmets
- Shoes

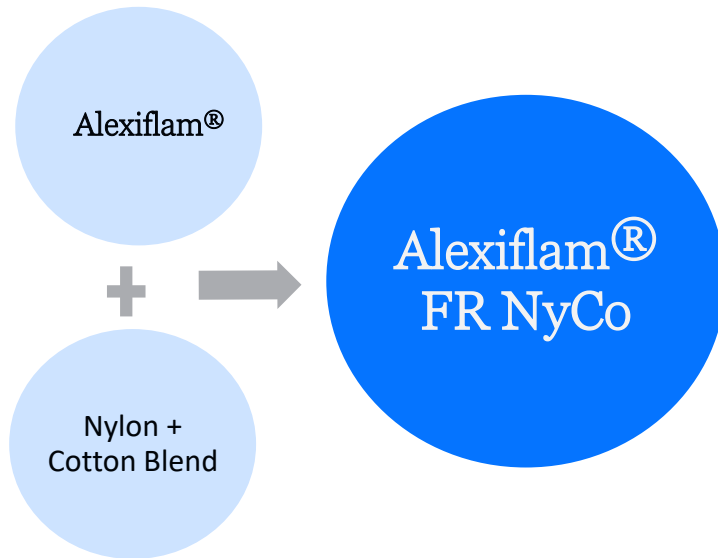
Product Update – FR NyCo

Alexiflam®

Innovative Technology delivering wash-durable flame retardation (FR) on nylon/cotton military fabrics.

The Problem: Production viable FR NyCo has been a market gap for decades

The Solution:



Product Features:

- Self extinguishes
- No melting or dripping
- Wash durable - industrial laundering
- Burnt fabric forms a strong char (in-tact)
- Light weight military FR fabrics
- Meets ASTM D6413 & AATC135 standards
- Improved tear strength over legacy military FR fabrics
- Increased comfort for military personnel (softer, more flexible)



Key Achievements, Current Milestones & Path Forward



FY18-22

Develop Company's Product Portfolio & Marketing Strategies

- Developed broad portfolio of thermal management products for microclimate regulation
- Demonstrated commercial advantage proposition for customers
- Growth with YoY increases in revenue while retaining strong margins
- Finalized application for flame retardant treatment of nylon/cotton fabrics for military uniforms
- Expanded outside of bedding into adjacent markets (e.g., body armor)

FY23

Foundation for Profitable Growth

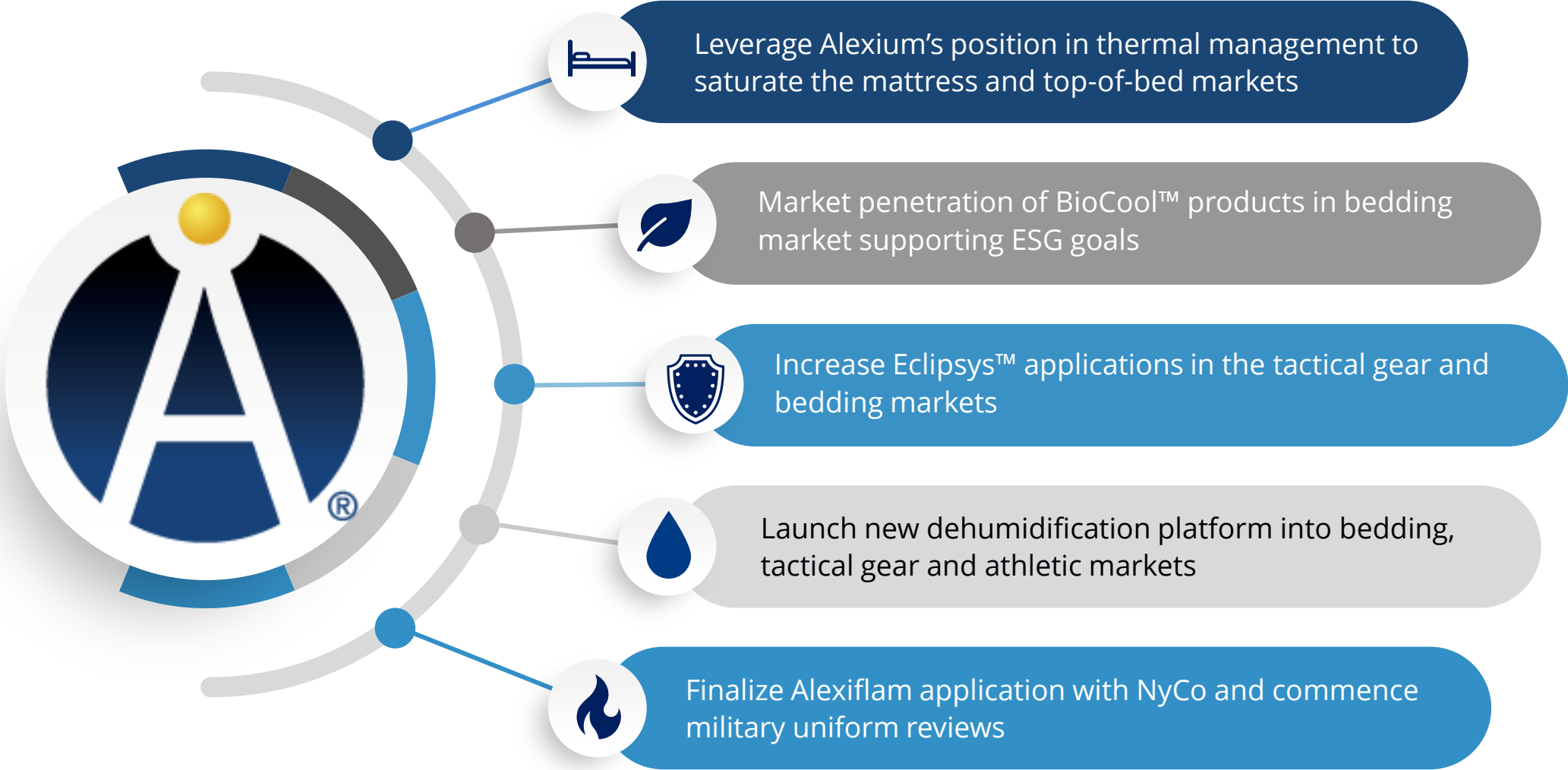
- Continued revenue growth through further saturation of the bedding markets (textile & foam)
- Market diversification through commercialization of innovative products (e.g., Eclipsys™ & DelQ)
- Strengthen the organization with the addition of a commercially oriented CEO
- Secure the Company's supply chain to ensure resiliency
- Cash flow positive

FY24-27

Deliver Meaningful Shareholder Returns

- Capitalize on globally unique and patent protected product range
- Expand the product application range into large adjacent markets
 - Outdoor apparel/gear
 - Shoes
 - Automotive
 - Electronics
- Commercialize key product platforms in major international markets
- Realize benefits of increased scale
- Deliver material growth in earnings, cashflow and share price

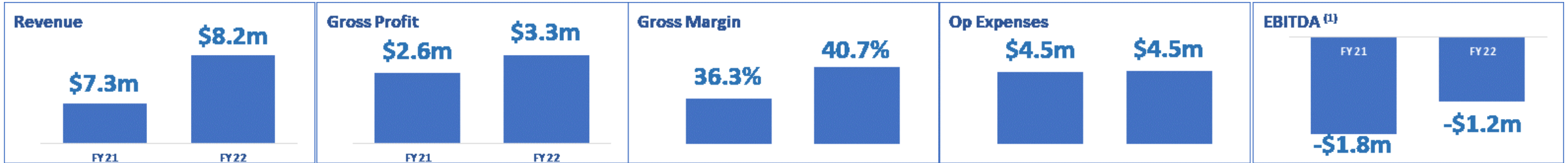
FY2023: Key Milestones - Building on Alexium's Foundation



FINANCIAL RESULTS



Profit and Loss Statement Spotlights



Profit and loss

- 12% revenue growth; very strong H1 overshadowed in H2 as consumer confidence softened in the US
- 26% increase in gross profit and over 400 BPS increase in gross margin
- Operating expenses in line with prior year in a tight labor market
- Although still in a loss position, EBITDA improved by ~\$0.6m

Impairment

- Lack of near-term revenue driving accounting treatment; these intangible assets would have been fully amortised within two years
- Commercial activities continue to advance despite impairment

(1) Operating EBITDA is non-GAAP financial measure

Balance Sheet Spotlights



Balance Sheet Commentary

- Cash reduced by \$1.9m with normal operating expenses, increased cash receipts and increased inventory purchases
- Net Working Capital increased by \$0.5m due to
 - Decrease in A/R with a decrease in revenue
 - Increase in Inventory with product purchases made as business was strong at the end of H1
 - Decrease in A/P with decreased product payments at the end of H2

Asset based line of credit working well

- Alterna CS has been seamless in funding
- Internal cash management optimized for funding needs and outlook