

ALEXIUM INTERNATIONAL GROUP LIMITED

Investors' Webinar

15 May 2025



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PRESENTED IN US DOLLARS

CONTENTS

- ❖ Introduction
- ❖ FY25 – Overview, Key Initiatives, and Tariff Impacts
- ❖ FY24 – FY27 – Strategic Pathway
- ❖ Sales Pipeline
- ❖ Alexium Product Portfolio – Focus on mPCM and FR
- ❖ Outlook

Introduction



The last several quarters have been a season of transformation for Alexium. We continued that transformation in Q3. In response to shifts in the market and in pursuit of sustainable growth, we sharpened our strategic focus to concentrate on two key areas of strength:

- **Thermal regulation and flame-retardant (FR) technologies** for sleep products, and
- **Flame-resistant, wash-durable coatings** for military and workwear applications.

It was more than a narrowing of focus—it was a full-scale effort to refocus and optimise our entire commercial operation, including sales, supply chain, distribution, and manufacturing. We recognised that in order to grow our niche position in the sleep products market and prepare for future opportunities we needed to modernise the way we operate.

We are proud to report major breakthroughs in our core technologies portfolio. In the flame-retardant technology portfolio, advances included the development of new coating solutions that meet performance standards **without the use of any currently banned substances**. At the same time, we made significant improvements to our **microencapsulated phase change materials (“mPCM”)** and the associated manufacturing processes. These latter advancements not only increase product performance and efficiency but also open doors for expanded applications in foam products and international markets.

With a strong portfolio of unique, valuable technologies and a refined go-to-market strategy, we are positioned for long-term success.

FY25 – Overview



During Q3, Alexium remained focused on executing its FY25 plan to support the *Grow and Diversify Strategy*, with an emphasis on aggressive revenue growth within its Core Markets. The organisational structure was aligned to deliver across five strategic focus areas:

1. Retention of Key Accounts in North America

The Company successfully retained supply to most of its existing North American bedding customers. However, volumes remained under pressure due to ongoing market conditions.

2. Product and Customer Diversification in North America

Significant progress was made in diversifying both the product portfolio and customer base in the North American bedding market. Late-stage pipeline opportunities advanced for PCM+, the new AlexiCool®, DelCool™, and AlexiShield with new customers.

3. International Expansion

Efforts to penetrate new bedding accounts in Asia Pacific, Latin America, and Europe are ongoing. While progress has been made, particularly with late-stage opportunities for DelCool™ and AlexiCool® in APAC and AlexiCool® in Europe, global trade tariff uncertainties have recently delayed momentum.

FY25 – Overview



4. Expansion into Adjacent Markets

Activities in adjacent market segments were deprioritised this quarter to focus on closing late-stage opportunities in the U.S. bedding sector.

5. Strategic Alliances and Co-Development

Notable progress was achieved with key supply chain partners. Co-development efforts focused on major new revenue opportunities:

- mPCM manufacturing improvements (high solids slurries and dry powder mPCM)
 - DelCool™ for mattress applications
 - AlexiShield for FR barrier solutions
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Key Initiatives – Global Trade – Tariff Impacts



As a recap, the Company made noteworthy progress against our product diversification strategy throughout FY24 and across the first three quarters of FY25. That progress created immediate opportunities for significant growth within our Core Market focusing on sleep products. Our development efforts for FR military apparel fabric stalled in Q3 as the new US Executive Branch moved through its review of federal agencies aimed at budget cuts and reorganisation. However, the military is signaling an imminent expedited approach to all military supply projects, and we expect that there are likely to be developments with respect to the FR military apparel fabric initiative in the near future. For Q3, we remained paused on efforts for thermal regulation in athletic gear, cold chain packaging and FR work wear to concentrate the team's focus on the achievement of the Company's near-term growth objectives.

The overall impact of the trade negotiations and the use of tariffs by the US Executive Branch to drive equitable outcomes will likely have an overall net positive impact on Alexium's business. Most of our key raw materials are sourced domestically in the United States. The raw materials that are sourced from international suppliers represent a small percentage of our supply chain, and most of these are small percentage additives that will not cause Alexium to make significant price increases to our current customer base. Alexium sources very little material from China. Our key customers in the bedding market appreciate our strong domestic sourcing network which has significantly reduced exposure to global disruptions.

FY24 – 27 Strategic Pathway

FY24 Diversify

- ✓ **Team:** Build out direct sales and BD
- ✓ **Culture:** Sales and marketing centric
- ✓ **Growth (40:20:40)**
 - ✓ Year-on-year revenue growth in core bedding market (AlexiCool®, BioCool®, DelCool™, Eclipsys®)
 - ✓ Progress FR Nyco for military.
 - X Commercialise Eclipsys® for tactical gear
 - X Commercialise Eclipsys® and FR in new markets (e.g., shoes, cold chain, workwear)
- ✓ **Operations:** Secure the company's supply chain to ensure resiliency
- X **Financial:** Cash and commercial discipline. Cashflow positive
- ✓ **Funding:** Adequate funding in place

FY25 Diversify

- ✓ **Team:** Develop sales and BD teams
- ✓ **Culture:** Sales and marketing centric
- ✓ **Growth (40:20:40)**
 - ✓ Year-on-year revenue growth in core bedding market (AlexiCool®, BioCool®, DelCool™, Eclipsys®)
 - ✓ Progress FR Nyco for military and FR barrier fabrics in bedding.
 - ✓ Commercialise Eclipsys® for tactical gear
 - × Commercialise Eclipsys®, DelCool™ and FR in new markets (e.g., shoes, medical, cold chain, workwear)
- ✓ **Operations:** Secure the company's supply chain to ensure resiliency
- × **Financial:** Cashflow positive

FY26-27 Profitable Growth

- **Team:** Bolster operations team, mature sales execs
- **Culture:** One Team – Customer-centric, Success breeds success.
- **Growth (40:20:40)**
 - Capitalise on globally unique and patent-protected product range
 - Commercialise key product platforms in major international markets
 - Expand the product application range into large adjacent markets (e.g. outdoor apparel/gear, shoes, automotive, electronics)
- **Operations:** Realise benefits of increased scale
- **Financial:** Material growth in earnings, cashflow and share price

Product Portfolio – mPCM – Comfort Technology



AlexiCool®

- Traditional microencapsulated phase change material (petroleum based)
- Effective on textiles and foam
- Premium PCM cooling for mattress and top of bed
- Absorbs heat while providing comfort and coolness
- Specifically formulated for application method
- Available in solution, slurry and dry powder
- Available in enhanced (+) derivatives

BioCool®

- Biobased microencapsulated phase change material (plant derived)
- USDA Bio-Preferred Certified (mPCM) with 94% bio content Eco-Certified
- COSMOS Certified
- Effective on textiles and foam
- Premium PCM cooling for mattress and top of bed
- Absorbs heat while providing comfort and coolness
- Specifically formulated for application method
- Available in solution, slurry and dry powder
- Available in enhanced (+) derivatives



Product Development Highlight

Improving and Leveraging
Alexium's Legacy
Microencapsulated Phase Change
Material (mPCM) Technologies



Product Enhancements Driving Near-Term Growth:

AlexiCool® and BioCool® have been the primary sources of the Company's revenue in recent periods. In late FY24, the Company revised its market strategy for mPCM. The strategic change led to the Company producing its own petroleum-based microcapsules. Alexium has always produced its own bio-based microcapsules. By producing all microcapsules in-house, the Company gained efficiencies in its manufacturing cost, performance, and quality. These changes also opened the opportunity for the Company to offer microcapsules to other formulators within the phase change materials market, which increases the addressable mPCM market for the Company's products by as much as 100%. The Company now has enough qualified opportunities for AlexiCool® in the sales pipeline to potentially triple the Company's revenue.

BioCool+ is the first derivative of PCM+ products the Company is launching. It is an enhanced mPCM formulation utilising biobased ingredients. The improvement is that this "plus" product has more cooling capacity than any legacy Alexium PCM, and any other competitive PCM currently available in the bedding market. The Plus+ derivative of BioCool® is now in trials that have had very positive initial results, with a major US mattress brand targeting a market launch in late CY25.

AlexiCool®

BioCool®

Product Portfolio - Flame Retardant Technologies



Alexi[®]Flam

- Customised solutions
- Designed for use in a variety of markets: FR suits (PPE), military fabrics, transportation, furniture, carpet
- Wash Durable
- Color Fastness

Alexi[®]Guard

- Flame retardant emulsion for use on 100% polyester fabric
- Nontoxic aqueous based solution, free from halogens, antimony, formaldehyde, PFAS, fiberglass
- Effective on woven and non-woven textiles
- Formulated for various application methods

Alexi[®]Shield

- Flame retardant emulsion for use on 100% synthetic and natural fibers and fabrics
- Nontoxic aqueous based solution, free from halogens, antimony, formaldehyde, PFAS, fiberglass, and organophosphorus
- Effective on woven and non-woven textiles
- Effective on foam
- Formulated for various application methods



Product Development Highlight

Improving and Leveraging
Alexium's Legacy Flame Retardant
(FR) Technologies



AlexiShield

AlexiGuard

AlexiFlam

Product Developments Diving Near-Term Growth:

AlexiShield is the Company's latest development in FR coatings. In early FY24, the Company developed an advanced FR formulation that is free of any banned substances, and free of substances with proposed bans. The initiative was fast-tracked to launch the advancement ahead of proposed bans on organophosphorus in California and New York. New York has since passed legislation banning organophosphorus from use in FR products in bedding and furniture. **AlexiShield** is highly effective on cotton, rayon, polyester, and foam. The Company has qualified opportunities in the sales pipeline with forecast annual revenues that could quadruple the current sales.

AlexiGuard® will remain in the Company's product portfolio. **AlexiGuard**® will be targeted at applications outside of bedding and furniture where regulatory bans do not hinder usage. For cost and performance, it remains a great FR finish for textiles that need the combination of self-extinguishing flame resistance paired with excellent softening attributes.

AlexiFlam® is the Company's go-to product for FR fabrics for military and workwear apparel applications. We remain active with development efforts for the US Military to deliver a low-cost, warm weather FR uniform kit made from nylon and cotton ("NyCo"). We are now in Phase 2 of the testing to validate aesthetic improvements, then to rerun trials to address heat signatures ("NIR" & "SWIR").

Product Portfolio – Thermal Regulation Materials



De|Cool™

- Textile composite based on a patent pending, first-in-class technology
- Made from comfortable, multi-stretch textiles
- Easily integrated into mattresses, pillows and toppers
- Comfort from dehumidification
- Regulates heat index
- Adaptive technology that improves comfort all night long
- Long-lasting, 8+ hours
- Regenerates after each night of sleep
- Works for those that sleep hot, and those that do not

Eclipsys®

- Textile composite for adaptive thermal regulation
- Easily integrated into several end-product applications
- Perpetual heat dissipation
- Adaptive comfort for bedding, furniture, footwear, headwear, and protective gear
- Improves heat flux in microclimates
- Regulates over-heating in batteries and electronics
- Regulates temperature in circular packaging



Product Development Highlight

Incorporating Alexium Technologies
into Branded Bedding Products
All Night Comfort Differentiation

DelCool™



Alexium Pillow:

Alexium has developed a luxury pillow that incorporates two of the Company's technologies. The concept originated as a simple marketing prototype to be utilised as a way to demonstrate the company's **DelCool™** technology. We started by showing it to potential customers that would brand and produce pillows utilising our materials. As we made the prototypes, we learned that we could leverage our supply chain to produce a high-tech, high-quality product at a competitive cost. We also determined that the suppliers had the capacity and desire to scale production of this pillow to full commercial rates. As a part of Alexium's commercial strategy, we have strived to move up the supply chain closer to the end customers. By producing and offering a private label pillow, the Company leverages the value of its novel technologies and realises a much higher revenue per unit sold (3X – 5X in most cases). Several prototypes have been produced. The pillows have tested 19 degrees cooler than comparable price point luxury pillows. The pillow has been shown to several bedding brands with feedback being very positive. It appears likely the **DelCool™** pillow system will be sold as an accessory alongside pending **DelCool™** mattress launches.

DelCool™ Mattress:

The Company has multiple qualified opportunities in the sales pipeline for **DelCool™** in major brand mattress launches. The brands intend to roll out these new mattress lines in AUS and North America in FY26 and FY27. For each opportunity, we have passed all initial targets for thermal performance in the prototype mattress builds. Alexium continues to develop **DelCool™** material applications that expand its usage beyond tri-layer textiles to non-woven loft for quilting, thus improving the ease of integration in a wider range of mattress types. These opportunities are for mattress lines with forecasted volumes amounting to enough **DelCool™** sales to triple the Company's current revenues.



Outlook

- Alexium is at an inflection point
- Microencapsulated PCM
 - Historical focus was textile centered
 - Now positioned for foam applications (larger market opportunity)
 - Now on the cusp of significant growth, despite soft market conditions
 - The mPCM market is ripe for consolidation
- Flame Retardants – Private Sector
 - The FR market opportunities are much larger than those for mPCM
 - The company spent years developing FR technologies, but was not positioned for commercialising those products
 - Over the past two years, we have readied these products for manufacturing and sales in several markets
 - The market trends and regulations are now in Alexium's favour
 - Alexium's pipeline has opportunities for significant growth from FR
- Flame Retardants – Military Sector
 - The company has invested significant time and resources in developing the FR apparel textile for the US military
 - Alexium now enters the second, and final phase of improvements and testing on this fabric prior to the Military issuing requests for proposals, leading to adoption and contracts.