

ALEXIUM INTERNATIONAL GROUP LIMITED

Investors' Webinar

8 November 2024



ABN 91 064 820 408

PRESENTED IN US DOLLARS

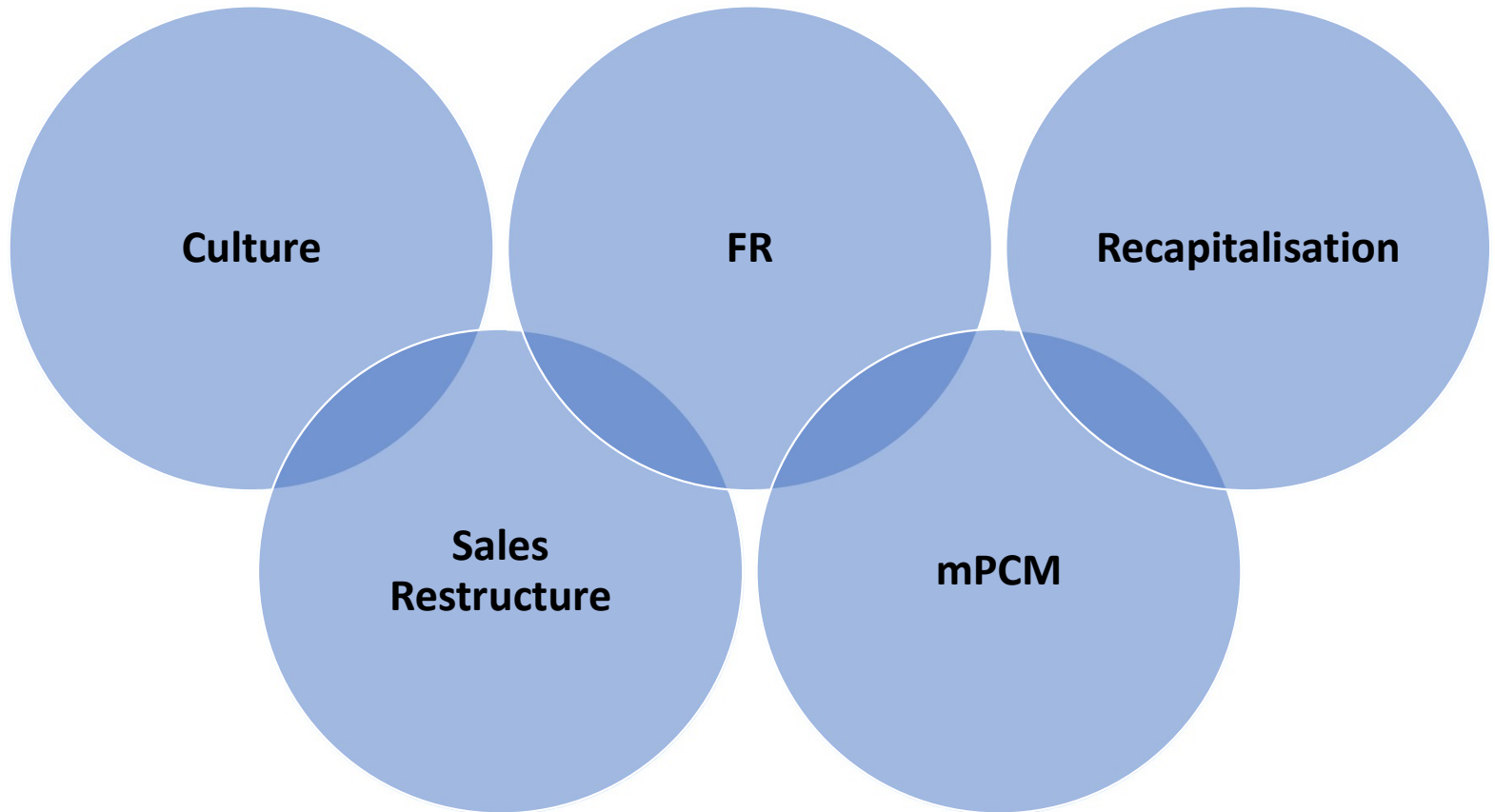
CONTENTS

- ❖ Introduction
- ❖ FY24 Plan - Recap
- ❖ FY25 Plan - Overview
- ❖ Alexium Product Portfolio – Spotlights on mPCM and FR
- ❖ FY25 – H2 Outlook
- ❖ Financial Update

Introduction



FY24 did not yield the targeted financial results, however it was a significant year of progress on many fronts.



FY24 Plan - Recap



Background: In late 2023 after a two-year slump in revenues from a weak bedding market, Alexium had to pivot and alter its approaches to business and product development. These changes also stepped-up efforts to address the company's over-concentration of PCM sales in the North American bedding market.

FY24 Recap:

- ✓ Sales Team - recruited seasoned sales professionals to deepen the skills and bandwidth of the sales team. The level and quality of activity had already begun increasing in Q4 FY24.
 - ✓ International Sales - executive management began making sales inquiries to international targets to diversify the business from its concentration in North America. The company is now pursuing new sales opportunities in Australasia, Asia and Europe.
 - ✓ Advisors - Alexium added an industry advisor to help steer the business into markets adjacent to bedding.
 - ✓ Directors – The Board was restructured with the addition of two new directors beginning in FY25 that serve as strategic advisors to the business.
 - ✓ Enhanced Products – the company made significant advancements in its offerings for Flame Retardant (FR) technologies and Microencapsulated Phase Change Materials (mPCM).
-

FY25 Plan – Overview



In FY25, Alexium has embarked on the next phase of executing our *Grow and Diversify Strategy* – a plan to aggressively grow revenues in its core and breakthrough markets. We have structured the team to focus on the following five critical focus areas:

- I. Maintaining the Company's key accounts and sales in the North American bedding market
 - II. Saturating the North American bedding market through diversification of product and customer mix
 - III. Sales growth by breaking new accounts abroad in the APAC, LATAM and EU bedding markets
 - IV. Diversified revenue growth from new sales of the company's existing technologies into adjacent markets (Eclipsys®, DelCool™, AlexiFlam®, AlexiGuard® & AlexiShield).
 - V. Strategic alliances with key supply chain partners to co-develop products to take to market that leverage the strengths of each partners' key value proposition.
-

FY25 Plan – Sales Approach/Key Objectives



Sales Approach: Alexium will continue to develop the experienced sales executives to:

- Sell the Company's products to its current core market (bedding) to further saturate its North American customer base
- Diversify the product offering to the core market by adding DelCool™, Eclipsys® and FR sales to its existing PCM sales
- Break new accounts globally (APAC, EU, LATAM) and repeat the same multi-product offering to the core market
- In parallel, but at a lesser %, sales will work on selling Alexium's existing technologies to non-bedding markets (adjacent)
- The Company will leverage the skillsets and relationships of all stakeholders to open doors for top-down sales in all areas
- Once the current team is up to speed and getting meaningful results, the Company will hire additional sales professionals to increase activity and to push further into all markets. It is likely these team members will focus solely on adjacent market development

Key Objectives: The key execution milestones are as follows:

- Double the month-over-month sales volume of FY24 from \$500K to \$1MM (cash-positive threshold) ASAP
 - Reach a sustained, minimum month-over-month contracted sales volume of > \$1MM (longer-term cash-positive hurdle)
 - Secure long-term, high-volume supply agreements to shore up sustained revenues
 - Update the ASX regularly on these successful milestones to reinforce progress with shareholders and market
 - Leverage this momentum, and reinvest in the business to grow Alexium to maximum earnings and a valuation that supports a share price that rewards all stakeholders
-

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



FY 25 – 27 Strategic Plan - Growth drivers

A) Maintain – PCM sales to Bedding

+

B) Grow & Diversify Revenue in the Bedding Market

=

+

C) Grow & Diversify Revenue to Markets adjacent to Bedding Market

**X) EXPONENTIAL RESULTS:
Diversified Revenue
Growth for Cash Positive
Results then Significant
Growth and Increased
Share Value (FY25 – FY27)**

$$A + B + C = X!$$

A) Alexium must maintain its foundational PCM sales to existing customers in North America in its core market of bedding.

B) Sales growth through further saturation of that core market, then adding customers, then additional growth from the diversified products sold in the bedding market. In parallel, globally replicate this approach.

C) To mitigate over-concentration in bedding, AJX must break into adjacent markets, including FR for military fabrics, workwear and other home goods as well as thermal regulation for athletic gear, footwear, headwear, medical applications, packaging, and electronics.

When we execute “A + B + C”, Alexium will be cash positive, self-funding and have a higher share price with sustained year-over-year growth.

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 Diving 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 sharply increases the addressable mPCM market for the Company's products by as much as 100% (based on customers' forecasted volumes of active development projects in the AJX pipeline).

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. Early customer feedback suggests many will select this product to replace Alexium's competitor's PCM due to the cost vs performance benefits.

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



Product Enhancements 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.

The team leveraged all that was known from the Company's existing FR product, **AlexiGuard**®. From there, the team developed a new formulation that was free of any substances of concern. **AlexiShield** is highly effective on cotton, rayon, polyester, and foam. The company has performed several production trials on these substrates with passing burn tests on each.

Alexium is working with its textile supply chain to offer **AlexiShield** treated fabrics for use as FR barriers in bedding and furniture, with plans of offering these rolled goods to others in the transportation and home furnishings markets. The chemistry will be sold separately as well. There are several active projects for **AlexiShield** in the Company's pipeline that are expected to close in Q3 and ramp throughout the balance of FY25.

AlexiShield

Product Portfolio – Thermal Regulation Materials



DelCool

- 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 Privately-labeled Products for
Speed to Market and Increased
Revenue per Unit Sold



Alexium Pillow:

Alexium has developed a luxury pillow that incorporates two of the Company's technologies. The concept originated as a simple marketing tool with the pillow prototype to be utilised as a way to demonstrate the company's **DelCool™** and **AlexiCool®** technologies. 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. Additionally, Alexium's commercial strategy has been to move up the supply chain closer to the end customers and stop the practice of middlemen harvesting the value created by Alexium technologies. 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. Many with foam cores, and others with fiber-fill. The foam cores are a new advanced foam that is more breathable than most viscoelastic/memory foams in the market. The pillows have tested 19 degrees cooler than the same pillow builds without the Alexium technology incorporated. The Company has shown the pillow to several bedding brands over the last few months. The initial feedback has been very positive with one brand working on the branding and merchandising plan for a 2025 launch.

DelCool

AlexiCool®





FY25 Q2 & H2 Outlook

Despite the sluggish start in Q1, the Company expects to catch up on the trailing results over the balance of the Fiscal Year. There are several new opportunities in the Pipeline that are expected to close in Q2 and early Q3. These are expected to start in H2 and ramp to full rates by the end of FY25. The potential revenues from these opportunities are enough for the business to meet, or possibly beat budget, achieve cash-positive results, then achieve sustained profitable growth from there forward. The refinements to the Strategy paired with the increased near-term focus on mPCM and FR sales has made this possible. The team at Alexium remains focused on delivering positive and meaningful results to all stakeholders in the near-term.

Financial Update



Renegotiation & Extension of Line of Credit

The Company has an outstanding asset-based line of credit (LOC) with Alterna Capital Solutions (ACS). The LOC has a stated maximum funding of \$3.0 million which can be increased to \$5.0 million with the approval of the lender. The borrowing base of the LOC consists of 90% of eligible accounts receivable plus a calculated portion of inventory which, among other factors, will not exceed 50% of eligible inventory.

Effective 1 August 2024, the Company renegotiated and extended the terms of the LOC. The interest rate spread above the US Prime Rate was reduced by 2 percentage points (from 5% above Prime to 3% above Prime), the term of the agreement was extended to 28 February 2026 (from the original term which was due to expire 4 April 2025) and the monthly and annual fixed fees were all reduced. There was no change to the maximum funding amount available under the agreement or the collateral on which it is based.

Q1 FY25 Cash Flow Commentary

Alexium continues to apply a disciplined approach of prioritising short-term revenue opportunities while advancing secondary new business focus areas to ensure medium-to-long-term growth objectives are met. The Company has been applying the same level of discipline to managing expenses, timing of raw material purchases and the entire cash conversion cycle. In addition, the Company has been successful in negotiating cost reductions in several raw material products used in both current and future sales opportunities.

Sales for the quarter at US\$1.1 million were down US\$0.4 million versus the prior quarter (FY24 Q4). Overall, US mattress market conditions remained soft amid inflationary concerns, high interest rates and geopolitical concerns. However, the US Federal Open Market Committee (FOMC) has reduced the US prime interest rate effective 18 September 2024 by 50 basis points. This is the first reduction in the rate since March 2020 and has ended a period of unprecedented interest rate increases in the US. From March 2022 – July 2023, there were 11 increases in the prime rate (total of 525 basis points) at which time the prime interest rate reached 8.5% (the highest rate since 2006) and remained there until September 2024.

Cash receipts for the period were US\$1.2 million with revenue of US\$1.1 million. Compared to the previous quarter (FY24 Q4), cash receipts decreased by US\$0.2 million due to the lower sales in the quarter.

Q1 FY25 Cash Flow Commentary (cont.)

Operating activity outflows (refer to Appendix 4C Item 1) primarily consist of raw material purchases, manufacturing costs, staffing costs, and corporate/administrative costs. The Company experienced a quarter-over-quarter decrease in interest expenses of US\$0.1 million due to the settlement of the Bridging Loan as part of the capital raise and refinancing transaction early in the prior quarter. Staffing expenses increased by \$0.2 million over the previous quarter due to headcount changes, payment of year-end incentives and the timing of bi-weekly pay periods. Other cash outflows are in line with typical quarterly expenses.

Total aggregate payments to related parties for the quarter equal US\$244 thousand which include payments to non-executive directors (directors fees and consulting fees) and compensation for executive directors William “Billy” Blackburn, CEO and Managing Director, and Robert “Bob” Brookins, CTO and Director.

Cash flows from financing activities for the quarter primarily consist of the normal activity on the Line of Credit. The outstanding balance on the Line of Credit at the end of the period was US\$551 thousand on the total eligible borrowing base of US\$722 thousand leaving US\$171 thousand available for use. This line availability plus the cash on hand of US\$1.428 million gives the Company total available funding of US\$1.599 million.