



ALEXIUM

ALEXIUM INTERNATIONAL GROUP LIMITED
FY2023 Half Year Results
24 February 2023

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PRESENTED IN US DOLLARS



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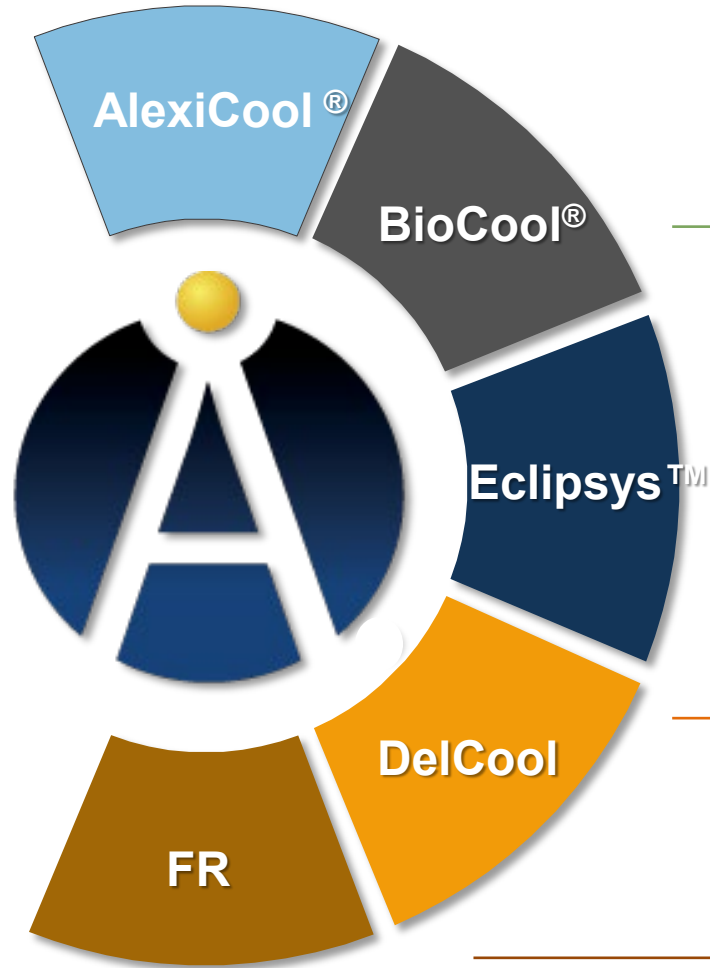
Company Overview

"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.
- A pioneer in phase change materials, specialising in innovative composites that offer adaptive thermal management through continuous heat dissipation and dehumidification.
- Alexium manufactures its products in the US with global distribution to Asia, Europe, and South America.



Alexium Core Technologies



AlexiCool®

PCM-based cooling products for textile & foam applications



BioCool®

*Proprietary **bio-based** cooling products for textile & foam applications*



Eclipsys™

Perpetual cooling technology for textile & foam-based products



DelCool

Dehumidification technology for thermal comfort in textile & foam-based products



Alexiflam® & Alexiguard™

Flame retardant treatment for textiles rich in synthetic and natural fibers

FY23 & FY24 - Market development priorities

Grow and diversify through four key enablers: grow and diversify bedding market revenue, commercialise Eclipsys™ for tactical gear, commercialise FR Nyco for military, and continued innovation.

Core Focus Areas (70%) – Bedding market revenue:

PCM, DelCool & Eclipsys™ applications:

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

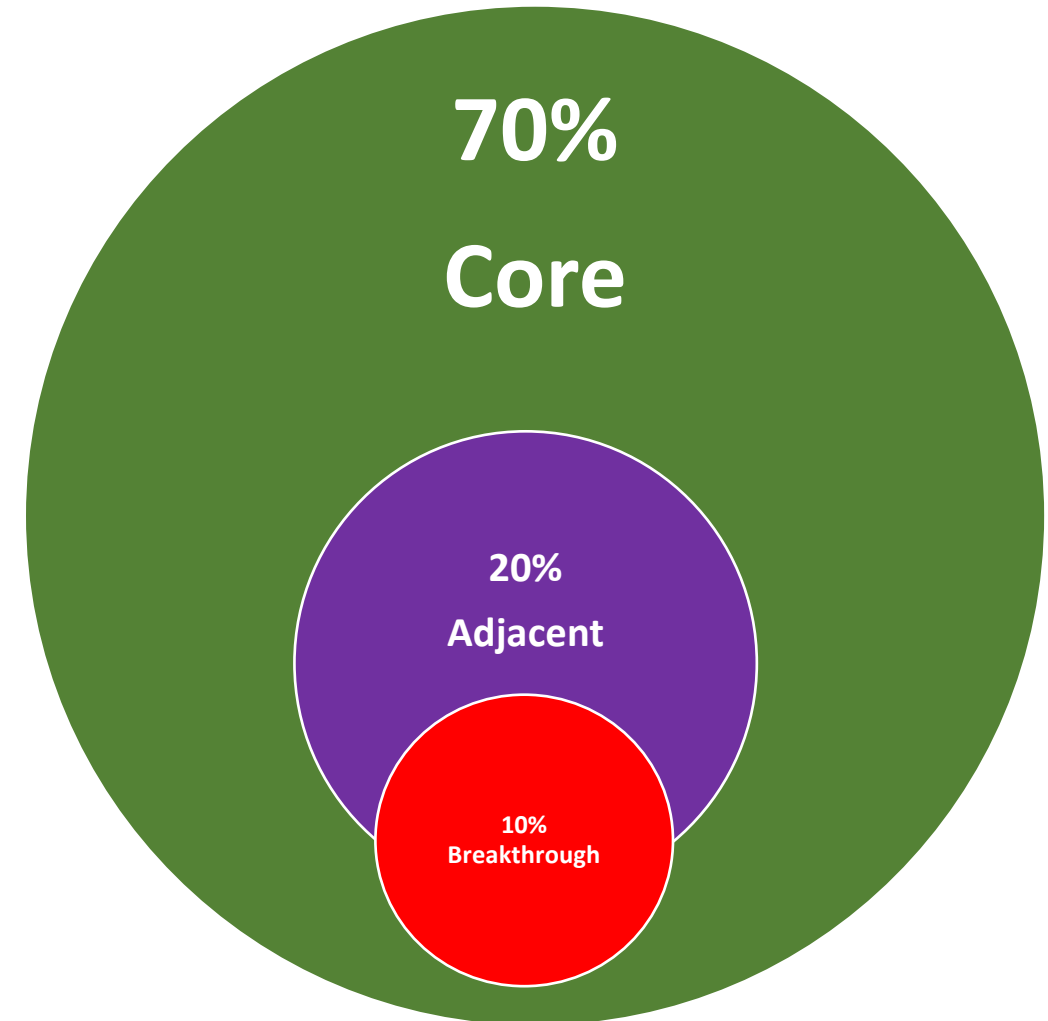
Adjacent Focus Areas (20%) - Military uniforms & Tactical Gear:

Alexiflam® & Alexiguard™ Applications:

- FR NyCo – US Army
- FR NyCo – US Marine Corp
- Eclipsys™ - Body Armor/Tactical Vests

Breakthrough Focus Areas (10%) – Innovation pipeline

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



Market development – FY23 2H Priorities



1

Core Focus:
Grow & Diversify Bedding Market Revenue



2

Adjacent Focus:
Eclipsys™ for Tactical Gear



3

Adjacent Focus:
FR NyCo for military uniforms

Bedding Focus - Milestones:

- Q3: Increased BioCool® sales to new customers in the US bedding market for mattress, pillow and bed topper applications
- Q3: DelCool sales commence in pillow applications
- Q4: BioCool® sales commence in Europe to Tier 1 producers making mattress textiles for a major global brand
- Q4: Eclipsys™ sales to commence in a mattress application for a major international brand, with significant new revenues to ramp throughout FY24
- Q4: Alexium's PD group achieves PCM enhancements delivering high-solids and dry powder formulas, which opens broader market applications (foam)

Tactical Gear Focus – Milestones

- Q3: Customer testing and field trials for ballistic vests
- Q4: New revenue from customer adoption of Eclipsys™ in tactical vests from successful testing and trials in Q3.

FY NyCo Focus - Milestones

- Q3: Complete lab testing and initiate the military's field evaluations of Alexium-treated FR NyCo uniforms
- Q4: Secure agreements with supply chain partners for the full-scale production of the FR NyCo treated fabric.

Bedding – Grow and diversify

alexicool®

biocool™

eclipsys™

DelCool™

*WHERE WE ARE
TODAY?*

*KEY NEXT STEPS
IN 2H FY23*

*VALUE TO
ALEXIUM*

- AlexiCool®/BioCool® brands are established premium products (received an Innovation Award from Serta Simmons Bedding) with applications on products in major retail stores across North America.
- Advances in our PCM chemistry and manufacturing pave the way for new sales across all segments of the bedding market, plus new developments in adjacent markets.
- Alexium PCM products achieve new market starts in Asia and Europe beginning global diversification.
- DelCool launched in pillows destined for US retail shelves in Spring 2023.
- Eclipsys™ based premium mattress design finalised for retail launch in late 2023.

- Continued revenue growth in textile applications in mattress & top-of-bed .
- Revenue growth and diversification in foam bedding applications, as well as new developments in non-bedding markets.
- Expanding the Company's customer base across a wider range of market segments.
- DelCool launch paves the way for high volume sales of comfort technology at a lower price point mattress.
- Eclipsys™ launch paves the way for high-dollar sales in the premium price mattress segment.

- Revenue growth from new customers of the improved PCM product suite.
- Reduced concentration risk from a single market vertical.
- Greater market penetration & diversification of customer base.

Eclipsys™ for Tactical Gear



WHERE WE ARE TODAY?

- Improvements to Eclipsys™ technology and manufacturing process led to new opportunities for product adoption.
- Learnings from field tests in 1H led to a streamlined integration of Eclipsys™ in tactical gear (increased % of success).

KEY NEXT STEPS IN 2H FY23

- New trials commence in Q3 FY23 at numerous customers.
- Alexium delivers improved sampling, testing and product application protocol that improves the likelihood of successful adoption.
- Successful field tests lead to new sales start in 2H FY23 with continuing growth in FY24.

VALUE TO ALEXIUM

- New revenue streams from new customers.
- Improved profit.
- Greater market penetration & diversification of customer base.

FR NyCo for military uniforms

alexiguard
& alexiflam[®]

WHERE WE ARE TODAY?

- Alexium has created a flame-resistant nylon + cotton fabric treatment utilising a combination of the Alexiguard™ + Alexiflam® chemistries.
- Alexium has delivered production-scale FR NyCo treated fabric that passed initial military test requirements for weight, strength and flame resistance. Samples are currently under review by the US Military.

KEY NEXT STEPS IN 2H FY23

- Deliver treated fabric for cut-and-sew of uniforms for military field testing based on the results from the military lab testing.
- Establish and secure supply chain to manufacture and deliver full-scale production of US Military uniforms.

VALUE TO ALEXIUM

- New & large revenue streams
- Diversified market and customer base
- Improved profitability



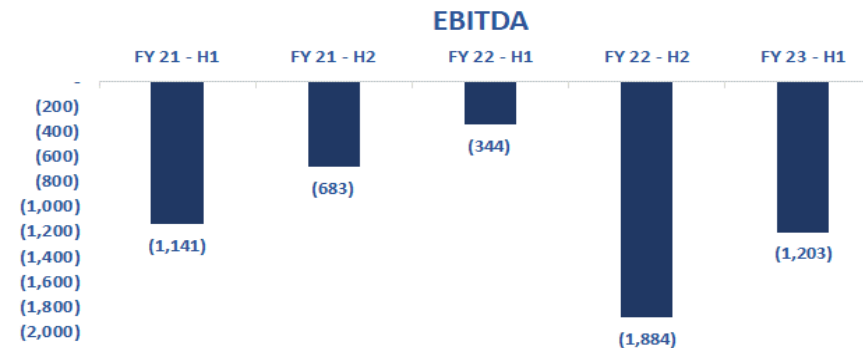
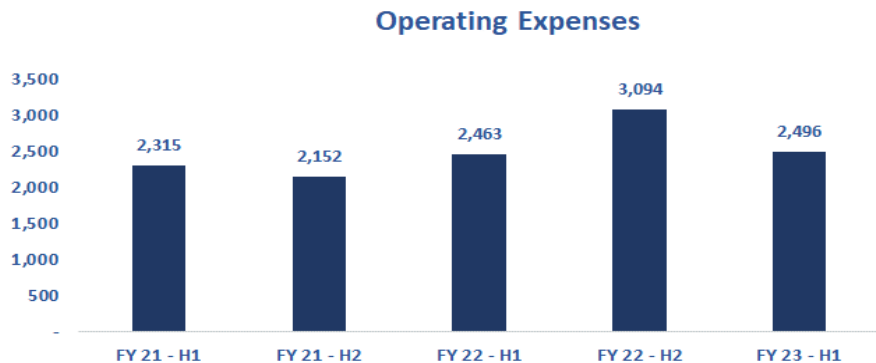
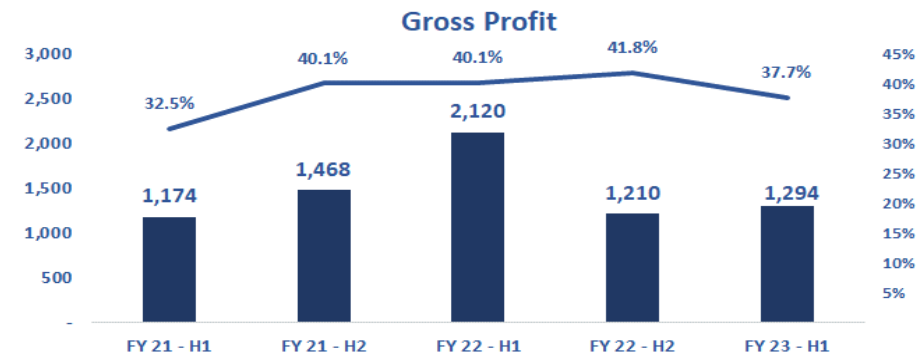
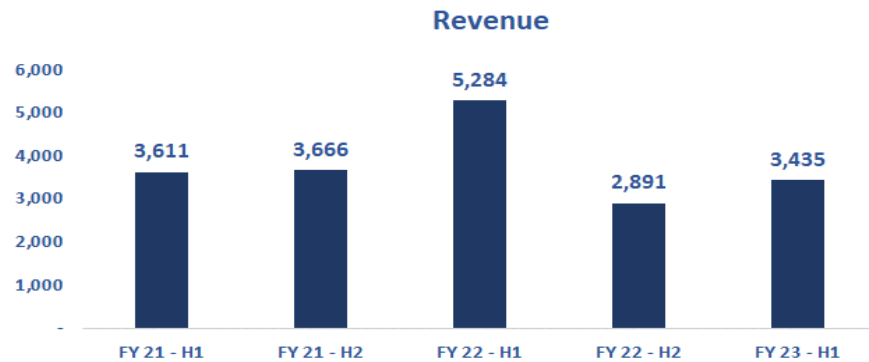
Half Year Financial Results

Financial Snapshot

Signs of recovery in bedding market



- ✓ Revenue decreased 35.0% vs 1H FY22 but up 18.9% from H2 FY22 as bedding market continues its recovery
- ✓ Net cash outflows from operating activities decreased by \$0.2m to (\$1.2m) due to lower revenue
- ✓ Operating expenses remain flat compared to 1H FY22
- ✓ Gross margin at 37.7% is down from 2H FY22 and from same period last year due to product mix



Cash Flow Statement



- Operating Activities outflows increased \$0.2m with changes in:
 - ✓ (\$3.0m) – cash receipts
 - ✓ \$2.6m - reduced product purchases
 - ✓ \$0.2m – all other costs
- Financing Activities increased \$1.5m with changes in:
 - ✓ \$1.0m – proceeds from modification of convertible note
 - ✓ \$0.5m – timing for repayment of line of credit

	HY23 (USD)	HY22 (USD)
Cash flow from operating activities		
Receipts from customers and other income	2,713	5,725
Payments to suppliers and employees	(3,837)	(6,483)
Interest received	4	2
Interest and other costs of finance paid	(68)	(168)
Goods & services tax received	15	10
Net cash flows (used in) operating activities	(1,174)	(914)
Cash flows from investing activities		
Purchase of property, plant and equipment	(3)	(50)
Payments for development costs	(193)	(66)
Net cash flows (used in) investing activities	(196)	(115)
Cash flows provided by financing activities		
Proceeds from borrowings	2,645	-
Proceeds on substantial modification of convertible note	1,022	-
Repayment of borrowings	(2,211)	(42)
Share issuance transaction costs	(1)	-
Net cash flows from/(used in) financing activities	1,456	(42)
Net increase / (decrease) in cash and cash equivalents	86	(1,071)
Cash and cash equivalents at beginning of year	1,027	2,933
Effect of exchange rate changes on cash	(11)	(33)
Cash and cash equivalents at end of year	1,102	1,829

Profit & Loss Statement



- Revenue decreased as bedding market continues its recovery
- Gross Profit down \$0.8m with decreased gross margin and revenue
- Operating expenses flat
- Interest Expense up with the addition of Alterna line of credit
- Loss on Debt Extinguishment (\$0.6) related to the amendment and restatement of the Colinton convertible note

	HY23 (USD)	HY22 (USD)	Change	% Change
Sales Revenue	3,435	5,284	(1,849)	(35.0%)
Cost of Goods Sold	(2,142)	(3,164)	1,022	(32.3%)
Gross Profit	1,294	2,120	(826)	(39.0%)
Gross Margin	37.7%	40.1%	(2.5%)	
Operating expenses	(2,496)	(2,463)	(33)	1.3%
Operating EBITDA ⁽¹⁾	(1,203)	(344)	(859)	(250.0%)
Depreciation & Amortisation	(329)	(527)	198	(37.6%)
EBIT	(1,531)	(871)	(661)	75.9%
Interest & Amortisation of Convertible Note	463	368	94	25.6%
Loss on Debt Extinguishment	576	-	576	
(Gain)/Loss Change in FV of Derivative	(192)	716	(909)	(126.8%)
Finance income	(4)	(2)	(2)	90.2%
Finance Costs Total	843	1,083	(240)	(22.1%)
Net Loss	(2,375)	(1,954)	(421)	(21.6%)

(1) Operating EBITDA is a non-GAAP financial measure see appendix for reconciliation of Operating EBITDA to statutory net profit/(loss) after tax.

Balance Sheet



- Net Working Capital
 - Overall working capital increased by \$0.1M versus comparative period. Trade receivables & trade payables were higher, and inventory decreased due to lower sales.
- Non-Current Assets
 - Decrease of \$0.1m with minimal additions to fixed and intangible assets.
- Current Liabilities – Line of credit
 - Functional use of the line of credit continues with movements occurring based on cash needs. As of the reporting date there was approximately \$1.0M of free capacity available for use.
- Non-Current Liabilities
 - Colinton Capital A\$5.15m four-year 6% convertible note was amended and restated at the end of December with a A\$7.0m three-year 10% convertible note which included A\$1.5M in additional cash.

	31-Dec-22 (USD)	30-Jun-22 (USD)
Current Assets		
Cash and cash equivalents	1,102	1,027
Trade and other receivables	1,183	579
Inventories	1,460	1,599
Other current assets	54	91
Total Current Assets	3,798	3,296
Non-Current Assets		
Other financial assets	18	17
Property, plant and equipment	849	968
Intangible assets	1,635	1,569
Right of use asset	520	575
Total Non-Current Assets	3,021	3,128
Total Assets	6,820	6,424
Current Liabilities		
Trade and other payables	1,103	816
Lease liabilities	127	118
Line of Credit	681	179
Total Current Liabilities	1,911	1,113
Non-Current Liabilities		
Borrowings	3,446	2,815
Derivative liability	1,319	182
Lease liabilities	671	737
Total Non-Current Liabilities	5,436	3,735
Total Liabilities	7,348	4,848
Net Assets	(528)	1,576
Equity		
Contributed equity	66,612	66,524
Reserves	(1,013)	(1,196)
Accumulated losses	(66,127)	(63,752)
Total Equity	(528)	1,576

Non-GAAP Financial Measure Reconciliation

Reconciliation of Operating EBITDA (non-GAAP financial measure) to statutory Net Profit/(Loss)



The consolidated financial statements of the Group are general purpose financial statements which have been prepared in accordance with the Australian Accounting Standards Board (AASB) and the Corporations Act 2001. The consolidated financial statements comply with International Financial Reporting Standards Board (IASB).

This presentation includes a non-GAAP financial measure which is not prepared in accordance with IFRS being:

Operating EBITDA: calculated by adding back (or deducting) finance expense/(income), depreciation, amortisation, gain/(loss) in FV of derivative liability, and loss on debt extinguishment to net profit/(loss) after tax.

The Group uses this measure internally and believes this non-GAAP financial measure provides useful information to readers to assist in position or returns, but that they should not be viewed in isolation, nor considered as a substitute for measures reported in accordance with IFRS. Non-GAAP financial measures may not be comparable to similarly titled amounts reported by other companies.

	HY23 (USD)	HY22 (USD)
Net Loss for the period	(2,375)	(1,954)
Add		
(+) Depreciation	181	189
(+) Amortization	147	338
(+) Interest expense	463	368
(+/-) Gain/(Loss) in FV of derivative liability	(192)	716
	1,175	1,612
Less		
(-) Interest Income	4	2
	4	2
Operating EBITDA	(1,203)	(344)



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