ALEXIUM

SPECIALTY CHEMICALS AND SOLUTIONS

Innovation. Growth. Leadership.

HALF-YEAR
FINANCIAL REPORT

For the six months ended
31 December 2017

Alexium continues to focus on diversifying its customer base with significant resources being dedicated to the flame retardancy market space in addition to work on new products in the Alexicool product line and increasing Phase Change Material (PCM) market share. Below is an update to key efforts in both the Flame Retardant (FR) and PCM market space.

UPDATE ON KEY INITITATIVES IN THE FLAME RETARDANT MARKET

Flame retardant chemistries continues to be an area of focus for Alexium. The ~$9.0B global market has, over the last 12 months, seen the regulatory environment shift heavily away from incumbent halogenated materials in favor of eco-friendly, non-toxic solutions such as those developed by Alexium. The September decision by the Consumer Product Safety Commission (CPSC) to begin the rulemaking process to ban the use of non-polymeric organohalogens spurred a series of U.S. State legislative actions banning the same materials. This regulatory shift is anticipated to further increase customer interest in Alexium's products, which will add to the Company's current robust sales pipeline which includes military, FR cotton, FR fleece, protective wood coating, among others. Updates in key initiatives are given below.

PENETRATION IN MILITARY UNIFORMS

Alexium continues to expand its military uniform strategy beyond the Flame Retardant Army Combat Uniform (FRACU) with strategic partners in this market. With the end goal of reducing the cost and increasing the durability of the current flame retardant uniforms across the four branches of the US Military, Alexium is making progress towards the milestones set forth in the December 2017 Quarterly Activities Report. The Company is currently in the process of finalizing fabric prototypes, which would be followed by external testing and a limited user evaluation (field trial). Alexium will update shareholders as progress is made in this effort.

ALEXIFLAM® NF DISTRIBUTION AND LICENSING STRATEGY

Alexium has developed Alexiflam NF as a proprietary flame retardant to provide a durable, formaldehyde-free treatment for cotton-rich fabrics. Based on the range of global markets and applications, Alexium is working with potential partners through a distribution/licensing strategy which will accelerate penetration into these markets. In the United States, where consumption of FR cotton chemistry is fairly consolidated, Alexium is pursuing two parallel paths: working to achieve registration with the Toxic Substance Control Act (TSCA), a necessary registration to sell chemistry in the United States; and working with potential customers to move opportunities down the development pipeline ahead of TSCA approval.

In Europe and Asia, Alexium is currently REACH pre-registered, which means that sales can commence in limited scale until full REACH registration is achieved. Alexium is ahead of schedule on the work required for REACH compliance with no anticipated hurdles to achieving full registration. As consumption of FR chemistry is more fractured internationally, Alexium is pursuing licensing arrangements with potential partners. We are currently running production trials directly with end customers and with distribution partners with revenue anticipated in Q4 CY18. Alexium will announce to the market when any license agreements are finalized.

THE GLOBAL BEDDING MARKET AND ALEXIUM

Key Highlights:

- In the global bedding market, bedding manufacturers sold 17.0M mattresses in the US in 2016 and 61.1M mattresses were sold internationally
- For the entire industry, 34.0M yards of ticking were sold in the US and 122.2M yards sold internationally
- Alexium has significant upside in the bedding market, currently occupying only 5% in the US and ~1.0% globally of PCM sales into mattress ticking
- Expansion into other components (foam, high loft and sock) represent a 3x potential increase in Alexium PCM usage in bedding market beyond ticking
- Alexium has developed a novel analytical method to evaluate PCM products which allows us to quantify cooling performance on fabric, a factor that has historically limited adoption and expansion of PCM into the bedding industry

OVERVIEW

During the course of CY17, the bedding market has been a significant part of Alexium's top- and bottom-line improvements. Alexium launched its first Alexicool product in mid-2016 and over the next 18 months it became a major driver of both revenue and margin growth. The goal of the information below is to give the shareholders a clearer sense of the breakdown of the bedding market, the scale of the role Alexium currently plays in that market, and key drivers playing a larger role moving forward.

SCALE OF THE MARKET

The 2016 bedding market had a wholesale value of approximately US$30B, with 28% of those sales ($8.5B) going into the US and 72% ($21.2B) sold internationally. Important for Alexium shareholders is how those global sales numbers convert to units sold and thus into potential chemical sales.

Market data shows that 17.0M mattresses shipped within the US and 61.1M mattresses were sold overseas. Roughly 85% of the fabric shipments in the US are distributed among 15 top suppliers and among 6 major suppliers internationally. Globally, the largest mattress segment is the queen-sized mattress, occupying 38% of the market, followed by the full-sized mattress (26%), with the King, Twin and California King rounding out the market (17%, 16% and 3% respectively). After combining unit shipping volumes together with dimensions of ticking and border fabric in each mattress size, these unit sales translate into ticking and border fabric shipments of 34.0M linear yards of fabric in the US and approximately 122.2M linear yards internationally.

Using formulation components, add-on and price (all of which are determined by performance requirements), one can begin to get a sense of how much of the bedding market Alexium has penetrated. In 2017, Alexium chemistry was applied to approximately 1.4M yards of ticking and border fabric, or roughly 4.1% of mattresses sold in the US.   On a global scale, Alexium's chemistry is present in the ticking of only 1.0% of mattresses worldwide, representing significant upside to our current business.

*Data used in this analysis is from the International Sleep Products Association 2016 Mattress Industry Trends Report

CAPTURING THE UPSIDE

Alexium increasing its market share in the bedding PCM marketplace has several components. In the ticking area, the market for PCM chemistries (such as Alexicool®) in the US alone is 24x the size of Alexium's 2017 business, with a worldwide multiple of over 100x.

The market of all the mattress components, which includes cover fabrics, latex foam, urethane foam and internal system components (i.e. socks and high loft non-wovens) is even more significant. While data across these components is harder to collate with such a rapidly evolving market, estimates are that PCM sales into the other three components are comparable to sales into fabrics. Alexium has existing product or products in development for all four components.

THE ANALYTICS AND MESSAGING GAP

Over the last six months, it has become clear that a key to Alexium securing significant additional market share is not just having the best value proposition in the market but quantifying and messaging that value proposition well.

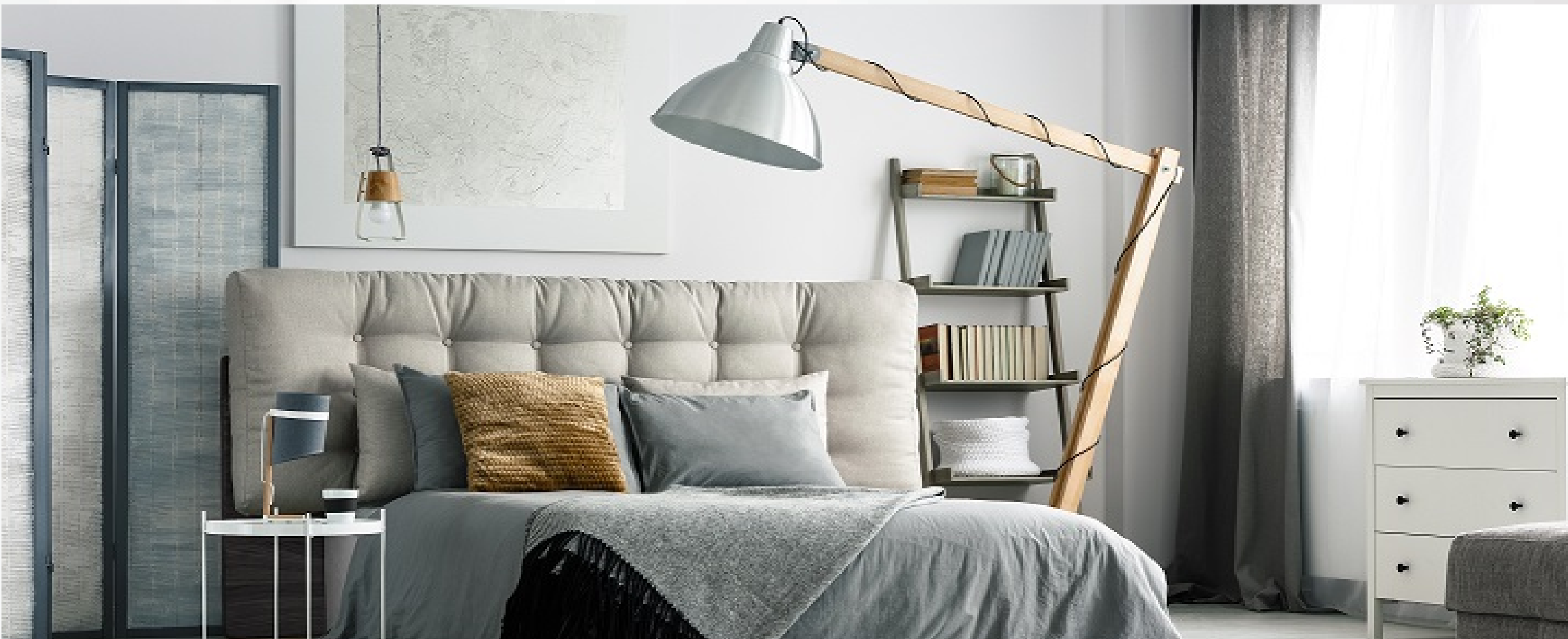
In the market today, there is one key headwind limiting the rate of PCM adoption in the bedding marketplace as well as brands switching brands of PCM once adopted. This headwind is poor/absent analytical data to validate and compare cooling chemistries across competitors, an issue Alexium is strategically poised to overcome.

While there have been a few qualitative or aesthetic methods to assess the coolness of treated fabric, there is no quantitative technique that provides reliable measure of PCM chemistry on material or, more importantly, the effectiveness of a PCM chemistry over time. The effect of this lack of metrics and data is two-fold:

- Some bedding brands are resistant to incorporating PCM chemistries in their products, especially at lower price points, without performance metrics
- High-performance PCM chemistries in the marketplace are experiencing downward price pressure in the absence of clear quantitative metrics differentiating them from commodity offerings

In the second half of 2017, Alexium made strategic investment in analytical equipment to assess the performance of our products and aid us in product design. As a result, Alexium quickly established a market leadership position in quantifying cooling performance and dynamics of its Alexicool products and compare said performance against any global competitor in real-world product integrations.

By developing this method, Alexium can now be a leader in quantifiable product development for our potential customers, and also allow our customers to quantify, on their own, the value Alexium's products bring. In a recent product analysis, Alexium showed that for similar product add-on, Alexicool provided twice the cooling of a leading competitive product. Analytics of this nature are a critical step in Alexium both widening the adoption of PCM in bedding and increasing market share in that space.



KEY STRATEGIC DRIVERS MOVING FORWARD

The most important strategic driver moving forward is developing clear and concise messaging around the Alexicool value proposition. Analytical methods have now been developed by Alexium to clearly show the value proposition of Alexicool against its competitors and we are now honing our communication to spread that message effectively.

A second strategic driver will be attacking the supply chain at multiple points in addition to the component level to ensure the Alexium value proposition is heard at all levels in order to maximize buy-in. That translates into driving the Alexium message to component manufacturers, bedding brands, and bedding retailers. Lastly, Alexium will continue to drive home the differen-tiation of Alexium's Alexicool products to our increasing number of ticking customers. However, key to increasing our sales in this market is to focus heavily on foam suppliers and the more consolidated international market. By expanding our sales and marketing efforts in this way, Alexium is addressing a market many multiples bigger in size than just the U.S. fabric market alone.

UPDATE FROM THE 2018 LAS VEGAS MARKET

In late January, Alexium attended the 2018 Winter Las Vegas Market, the most comprehensive furniture show in the United States, where multiple products using Alexium's chemistry were promoted. The focus of this year's Market for Alexium was to further broaden our global footprint in the mattress industry, both geographically and in components of the mattress outside of ticking.

For this purpose, Alexium hired a strategic market consultant with over 30 years' experience in the bedding space working in key roles with bedding brands as well as component manufacturers, including Sealy, Simmons and Latex International. This relationship helped facilitate meetings in Las Vegas with key decision makers at targeted companies. Similar to last year, the one of the largest themes in bedding was cooling, and interest in Alexicool was high. Response to Alexium's Alexicool chemistry was extremely strong at the show with key highlights being:

- Met with over 30 strategic potential customers that participate in the ticking, foam, and pillow applications
- Very strong interest with 2 key players in latex foam applications
- Already have developed 2 large ticking applications internationally and have shipped trial material to China for early March trial
- Initiated pillow project with potential customer for major retailer

Based on introductions and connections made at the Las Vegas Market, Alexium expects a increase to its project pipeline. This growth should continue following the International Sleep Products Association (ISPA) show in mid-March in Charlotte, NC. Whereas the Las Vegas Market is oriented around the bedding brands, ISPA, which happens every two years, is geared toward Alexium's customers, the component suppliers. ISPA is the world's largest mattress tradeshow.

PILLOW MARKET UPDATE

Alexium's relationship with pillow supplier Pegasus continues to strengthen. Initial shipments for full-scale production commenced at the end of the half-year and Alexium has received significant ramp-up in order quantity since the beginning of Q3 FY18. Additional increases in order quantity and volume are anticipated as Pegasus' orders and placements continue to grow.

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SUPPLEMENTARY APPENDIX 4D INFORMATION

This information is provided to the Australian Securities Exchange under ASX Listing Rule 4.2A (3). This information should be read in conjunction with the most recent annual financial report.

Current reporting period: 1 July 2017 to 31 December 2017
Previous reporting period: 1 July 2016 to 31 December 2016

				$A
Revenue from ordinary activities	Down	23%	to	$8,741,382
Loss from ordinary activities after tax attributable to members	Down	65%	to	($2,051,487)
Net loss for the period attributable to members	Down	65%	to	($2,051,487)

Dividends	Amount per security	Franked amount per security
Interim dividend declared this period	Nil	Nil
Interim dividend declared and paid in previous corresponding period	Nil	Nil
Final dividend 2017	Nil	Nil

Explanation of Revenue from ordinary activities

The Group's revenue during the reporting period is attributable to chemical sales in various textile markets with a core focus on Phase Change Materials (PCM) and Flame Retardants (FR). The Group's focus during the period was to increase market saturation of Alexium's PCM chemistry, continue to drive innovation and profitable sales in the environmentally friendly FR space, and reduce the financial burden caused by some low margin business won in 2016. A large piece of this strategy was the migration to a focus on platform technologies which allowed Alexium to narrow its focus on a few large markets and facilitate a much larger reach with fewer products.

Market penetration in PCM

During the period the Group recognized PCM sales of $4.9M, up 154% from $1.9M for the half-year ended 31 December 2016. This is largely attributable to an increase in market saturation as Alexium also saw a 70% increase in the number of customers purchasing PCM products over the same period. Several of these customers are still scaling up to full capacity and represent an opportunity to grow current PCM sales further still moving forward.

SUPPLEMENTARY APPENDIX 4D INFORMATION

Flame retardant sales

Sales of flame retardants, excluding lower margin business discussed below, grew by 149% over the period ended 31 December 2016. This is a result of continued sales efforts with a focus on higher margins in markets that are driven by innovation, such as the bedding market.

Discontinuation of lower margin sales

During the period Alexium successfully reduced revenue from markets not generating profit by $5.7M over sales to the same customers in the period ended 31 December 2016. This business was largely bespoke in nature and depending on the customer's needs, utilized varying amounts of Alexium's proprietary chemicals. The strategic decision to move away from this highly custom sales strategy assisted in the dramatic improvement of average gross margins from 1% to 25% over the same period and put much more of a focus on Alexium's proprietary solutions.

As a result of these factors, the Group saw a decrease in total revenue of $2.7M but an increase in gross margin of $2.1M, representing a 1900% improvement over the period ended 31 December 2016.

Explanation of Loss from ordinary activities after tax attributable to members and Net loss for the period attributable to members

The group's net loss for the period, $2,051,487 down from $5,806,993 for the half-year ended 31 December 2017, is related to improved margins on customer orders and improved SG&A cost structure. First, Gross profit margin on revenue from chemical sales rose 25 percentage points over the previous period. As Alexium continues to improve its sales of both Alexiflam™ and Alexicool™ chemistries with a wide range of customers across multiple markets, margins are expected to continue to rise. Secondly, substantial improvements have been realized in Alexium's cost structure across virtually all SG&A items. The Group also experienced an increase in interest expense related to the Company not having any long-term debt during the period ended 31 December 2016.

Net Tangible Assets	31/12/17	31/12/16
Net Tangible Asset backing per ordinary shares	2.96 cents	2.12 cents

Controlled entities acquired or disposed of

There were no entities acquired or disposed of during the current reporting period.

Additional dividend/distributions information

Not applicable

Dividend/distribution reinvestment plans

None

Associates and Joint Venture entities

None

DIRECTORS' REPORT

Your Directors submit their report for the half-year ended 31 December 2017.

The names of the Group's Directors in office during the half-year and until the date of this report are set out below. Directors were in office for this entire period unless otherwise stated.

Mr Gavin Rezos
Mr Craig Metz
Brigadier General Stephen Cheney
Fmr Congresswoman Karen Thurman
Dr Dirk Van Hyning - Appointed 13 November 2017
Ms Sue Thomas - Appointed 10 December 2017
Ms Claire Poll - Appointed 10 December 2017
Mr Nicholas Clark - Resigned 1 August 2017

RESULTS AND REVIEW OF OPERATIONS

The Group's net loss attributable to members of the Group for the half-year ended 31 December 2017 was $2,051,487 (half-year ended 31 December 2016 net loss: $5,806,993). This was largely a result of the increases in gross profits over the prior period noted above and a 20% decrease in total SG&A costs.

Administrative and other expenses decreased by 18% and 40% respectively, as a result of the Group's efforts to reduce overhead throughout the year. Employee benefits expense decreased by $0.69M or 30% as a result of changes to staffing in non-critical areas. Total number of employees dropped from 31 to 29 at the end of the period, which equates to a generated net loss per employee of $71,000 compared to approximately $187,000 for the period ended 31 December 2016.

While staff count went down, Alexium increased headcounts in research, product development, marketing, and sales, making more effective use of the number of full-time employee positions. R&D costs are down $0.32M or 30%, due to large expenses related to the buildout of labs and equipment for Alexium's facility which caused the period ending 31 December 2016 to be abnormally high. As a result of these expenses, depreciation for the period increased $0.05M or 33%.

Our research and development efforts have resulted in opportunities which are likely to result in technology licensing deals and new product lines which will drastically increase revenue and promote healthier margins. Further, the sales team has expanded its geographical reach, time spent on the road developing a growing customer base, and time spent collaborating with current customers.

For the six months ended 31 December 2017, the Group realized a $517,235 gain on extinguishment of a convertible note and embedded derivative. The carrying value of the note had not fully amortised at the time of payoff, with the balance being recognized as an other income item.

Further, the group realized a $1.43M gain on the change in the fair value of the embedded derivative related to long-term convertible notes. This is comprised of a $247,954 decline in value attached warrants as well as a $1,189,917 decrease in embedded derivative liability related to the convertible note originated during the period.

Finally, Alexium incurred interest and professional fees related to the debt facility refinance and Equity raise executed during the period. As a result, interest expense increased $1.46M and professional expenses increased $0.12M over the period ended 31 December 2016. The funds from these two transactions will allow Alexium to facilitate its growth as large opportunities come online throughout the year in military, bedding, and markets facing regulatory pressure. Alexium will be targeting strategies reduce its overall interest expense as the company continues to grow.

As at 31 December 2017 the cash position was $17,272,952 (30 June 2017: $3,409,783) and the Group had

340,737,998 ordinary shares on issue (30 June 2017: 303,827,998).

SUBSEQUENT EVENTS

Other than details below and events disclosed elsewhere in this report, no other significant event has occurred since the end of the financial year that may have a significant impact on the financial position of the group:

(a) Share Purchase Plan

After the end of the period on 18 January 2018, the Group concluded its Share Purchase Plan announced on 11 December 2017 resulting in applications being received by 276 registered shareholders for 4,705,600 shares totalling $1,646,960.

AUDITOR'S INDEPENDENCE DECLARATION

The auditor's independence declaration is included on page 7 of the consolidated half-year financial statements.

Dated this 27th day of February 2018.

Signed in accordance with a resolution of the Directors.

Dirk Van Hyning
Chief Executive Officer

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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 review of Alexium International Group Limited for the half-year ended 31 December 2017, 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 review; and

b No contraventions of any applicable code of professional conduct in relation to the review.

GRANT THORNTON AUDIT PTY LTD
Chartered Accountants

M J Hillgrove
Partner – Audit & Assurance

Perth, 27 February 2018

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CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE HALF-YEAR ENDED 31 DECEMBER 2017

	Note	Consolidated 31 December 2017 $	31 December 2016 $
Revenue	3	8,741,382	11,412,004
Cost of sales		(6,541,617)	(11,301,608)
Administrative expenses		(570,602)	(693,580)
Employee benefits expense		(1,620,200)	(2,307,682)
Depreciation and amortisation	8,9	(191,147)	(144,092)
Research and development		(735,483)	(1,058,051)
Professional expenses		(876,971)	(754,296)
Other expenses		(501,597)	(837,300)
Share-based payments	6	(246,141)	(120,202)
Loss before finance costs		(2,542,376)	(5,804,807)
Interest expense		(1,464,217)	(2,186)
Gain on debt extinguishment		517,235	-
Gain on embedded derivative		1,437,871	-
Total finance costs		490,889	(2,186)
Loss before income tax		(2,051,487)	(5,806,993)
Income tax benefit		-	-
Loss attributable to members of the Company		(2,051,487)	(5,806,993)
Other comprehensive income for the period			
Items that may be reclassified to profit or loss:			
Exchange differences on translating foreign operations		(301,044)	165,942
Total comprehensive income / (loss) for the period		(2,352,531)	(5,641,051)
Total comprehensive income / (loss) attributable to the members of the Company		(2,352,531)	(5,641,051)
Loss per share (cents)			
Basic		(0.66)	(2.61)
Diluted		(0.66)	(2.61)

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

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

FOR THE HALF-YEAR ENDED 31 DECEMBER 2017

		Consolidated	
	Note	31 December 2017 $	30 June 2017 $
Current Assets			
Cash and cash equivalents	4	17,272,952	3,409,783
Trade and other receivables		1,240,043	1,427,908
Inventories		1,978,199	2,091,028
Other current assets		108,474	101,129
Total Current Assets		20,599,668	7,029,848
Non-Current Assets			
Other financial assets		34,989	35,530
Property, plant and equipment	8	2,383,319	2,441,920
Intangible assets	9	137,176	143,299
Total Non-Current Assets		2,555,484	2,620,749
Total Assets		23,155,152	9,650,597
Current Liabilities			
Trade and other payables		1,659,363	1,830,037
Deferred income		-	32,458
Borrowings		233,113	5,854,376
Other liabilities		-	263,772
Total Current Liabilities		1,892,476	7,980,643
Non-Current Liabilities			
Borrowings		8,533,096	394,077
Derivative liability		2,523,483	1,056,403
Total Non-Current Liabilities		11,056,579	1,450,480
Total Liabilities		12,949,055	9,431,123
NET ASSETS		10,206,097	219,474
EQUITY			
Contributed equity	5	64,984,279	52,820,041
Reserves	7	8,847,085	8,973,213
Accumulated losses		(63,625,267)	(61,573,780)
TOTAL EQUITY		10,206,097	219,474

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE HALF-YEAR ENDED 31 DECEMBER 2017

	Contributed equity $	Option Reserve $	Performance Right Reserve $	Foreign Currency Reserve $	Accumulated losses $	Total $
Balance at 1 July 2017	52,820,041	7,203,859	759,360	1,009,994	(61,573,780)	219,474
Loss for the period	-	-	-	-	(2,051,487)	(2,051,487)
Foreign currency translation	-	-	-	(301,044)	-	(301,044)
Total comprehensive income / (loss)	-	-	-	(301,044)	(2,051,487)	(2,352,531)
Transactions with owners in their capacity as owners:						
Capital raise	12,005,000	-	-	-	-	12,005,000
Capital raising cost	(632,659)	-	-	-	-	(632,659)
Options exercised	456,900	-	-	-	-	456,900
Performance rights expense	-	-	174,916	-	-	174,916
Share-based payment	71,225	-	-	-	-	71,225
Shares to be issued	263,772	-	-	-	-	263,772
Balance at 31 December 2017	64,984,279	7,203,859	934,276	708,950	(63,625,267)	10,206,097
Balance at 1 July 2016	51,634,479	7,083,657	759,360	1,208,546	(49,418,512)	11,267,530
Loss for the period	-	-	-		(5,806,993)	(5,806,993)
Foreign currency translation	-	-	-	165,942	-	165,942
Total comprehensive income / (loss)	-	-	-	165,942	(5,806,993)	(5,641,051)
Transactions with owners in their capacity as owners:						
Options exercised	483,583	-	-	-	-	483,583
Share-based payment	178,690	120,202	-	-	-	298,892
Share-based payment in lieu of salary	174,749	-	-	-	-	174,749
Balance at 31 December 2016	52,471,501	7,203,859	759,360	1,374,488	(55,222,505)	6,583,703

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

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE HALF-YEAR ENDED 31 DECEMBER 2017

	Note	Consolidated 31 December 2017 $	Consolidated 31 December 2016 $
Cash flows from operating activities			
Cash receipts in the course of operations		9,155,311	9,330,322
Cash payments to suppliers and employees		(11,382,029)	(13,939,844)
Goods & Services tax received from ATO		35,943	77,184
Interest and other costs of finance paid		(552,250)	(5,415)
Interest received		5,206	8,795
Net cash flows used in operating activities		(2,737,819)	(4,528,958)
Cash flows from investing activities			
Increase in intangibles		-	(36,804)
Purchase of property, plant and equipment		(21,933)	(1,544,608)
Other non-current assets		-	(5,404)
Proceeds from disposal of property, plant and equipment		-	547
Net cash flows used in investing activities		(21,933)	(1,586,269)
Cash flows from financing activities			
Proceeds from issue of ordinary shares		11,729,999	-
Proceeds from exercise of share options		456,900	483,583
Proceeds from borrowings		12,161,135	6,674,676
Repayment of borrowings		(6,440,508)	-
Transaction costs related to issues of shares		(678,952)	-
Transaction costs related to loans and borrowings		(577,640)	(126,085)
Net cash flows provided by financing activities		16,650,934	7,032,174
Net increase in cash and cash equivalents		13,891,182	916,947
Cash and cash equivalents at beginning of period		3,409,783	11,218,556
Effect of exchange rate changes on cash and cash equivalents		(28,013)	221,619
Cash and cash equivalents at end of period	4	17,272,952	12,357,122

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

1. CORPORATE INFORMATION

The financial report of Alexium International Group Limited (the Company) for the half-year ended 31 December 2017 was authorised for issue in accordance with a resolution of the directors on 27 February 2018.

Alexium International Group Limited is a company incorporated in Australia and limited by shares, which are publicly traded on the Australian Securities Exchange.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The consolidated half-year financial statement does not include all of the notes of the type normally included within the annual financial report and therefore cannot be expected to provide as full an understanding of the financial performance, financial position and financing and investing activities of the consolidated entity as the full financial report.

The consolidated half-year financial statements should be read in conjunction with the annual financial report of Alexium International Group Limited as at 30 June 2017.

It is also recommended that the consolidated half-year financial statements be considered together with any public announcements made by Alexium International Group Limited and its controlled entities ("the Group") during the half-year ended 31 December 2017 in accordance with the continuous disclosure obligations arising under the *Corporations Act 2001*.

(a) Basis of Preparation

The consolidated half-year financial statement is a general-purpose financial report, which has been prepared in accordance with the requirement of the *Corporations Act 2001*, applicable Accounting Standards, including AASB 134 "Interim Financial Reporting" and other mandatory professional reporting requirements. The consolidated half-year financial statement has been prepared on a historical cost basis, except where stated. For the purpose of preparing the consolidated half-year financial statements, the half-year has been treated as a discrete reporting period.

(b) New and Revised Accounting Requirements Applicable to the Current Half-Year Reporting Period

The accounting policies and methods of computation adopted in the preparation of the consolidated half-year financial statements are consistent with those adopted and disclosed in the Group's 2017 annual financial report for the financial year ended 30 June 2017. These accounting policies are consistent with Australian Accounting Standards and with International Financial Reporting Standards. Alexium International Group Limited has adopted all of the new and revised Standards and Interpretations issued by the Australian Accounting Standards Board (the AASB) that are relevant to their operations and effective for the current half-year. The application of the new or revised Standards and Interpretations does not have a material impact on the accounting policies or disclosures.

(c) Adoption of new and revised Accounting Standards

In the half-year ended 31 December 2017, the Company has reviewed all of the new and revised Standards and Interpretations issued by the AASB that are relevant to its operations and effective for annual reporting periods beginning on or after 1 July 2017.

AASB 9 Financial Instruments introduces new requirements for the classification and measurement of financial assets and liabilities and includes a forward-looking 'expected loss' impairment model and a substantially-changed approach to hedge accounting. When this standard is first adopted for the year ending 30 June 2019, there will be no material impact on the transactions and balances recognised in the financial statements.

AASB 15 Revenue establishes a new revenue recognition model and changes the expands and improves disclosures about revenue. When this standard is first adopted for the year ending 30 June 2019, there will be no material impact on the transactions and balances recognised in the financial statements.

AASB 16 Leases requires all leases, other than short term and low value asset leases to be accounted "on balance sheet". When this standard is first adopted for the year ending 30 June 2019, there will be no material impact on the transactions and balances recognised in the financial statements.

The directors have also reviewed all other new Standards and Interpretations that have been issued but are not yet effective for the half-year ended 31 December 2017. As a result of this review the directors have determined that there is no impact, material or otherwise, of the new and revised Standards and Interpretations on the Company and, therefore, no change is necessary to Company accounting policies. These accounting policies are consistent with Australian Accounting Standards and with International Reporting Standards.

The Company has also reviewed all new Standards and Interpretations that have been issued but are not yet effective for the half-year ended 31 December 2017. As a result of this review, the Directors have determined that there is no impact, material or otherwise, of the new and revised Standards and Interpretations on its business and therefore no change is necessary to Company accounting policies.

(d) Principles of Consolidation

The consolidated half-year financial statements incorporate all of the assets, liabilities and results of the parent (Alexium International Group Limited) and all of the subsidiaries (including any structured entities). 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 has the ability to affect those returns through its power over the entity.

The assets, liabilities and results of all subsidiaries are fully consolidated into the financial statements of the Group from the date on which control is obtained by the Group. The consolidation of a subsidiary is discontinued from the date that control ceases. Intercompany transactions, balances and unrealised gains or losses on transactions between Group 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 Group.

Equity interests in a subsidiary not attributable, directly or indirectly, to the Group are presented as "non-controlling interests". The Group 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. Subsequent to 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.

(e) Significant accounting policies

Share-based payments

Employees (including senior executives) and suppliers of the Group receive remuneration in the form of share-based payments, whereby employees and suppliers render services as consideration for equity instruments (equity-settled transactions).

The cost of equity-settled transactions is determined by the fair value at the date when the grant is made using an appropriate valuation model, further details of which are given in Note 2(e).

That cost is recognised in employee benefits expense (for employees) and respective profit or loss accounts (for suppliers), together with a corresponding increase in equity, over the period in which the service and, where applicable, the performance conditions are fulfilled (the vesting period). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The expense or credit in the statement of profit or loss for a period represents the movement in cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

No expense is recognised for awards that do not ultimately vest because non-market performance and/or service conditions have not been met. Where awards include a market or non-vesting condition, the transactions are treated as vested irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

When the terms of an equity-settled award are modified, the minimum expense recognised is the grant date fair value of the unmodified award, provided the original terms of the award are met. An additional expense, measured as at the date of modification, is recognised for any modification that increases the total fair value of the share-based payment transaction or is otherwise beneficial to the employee. Where an award is cancelled by the entity or by the counterparty, any remaining element of the fair value of the award is expensed immediately through profit or loss.

(f) Significant accounting judgements, estimates and assumptions

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 Group based its assumptions and estimates on parameters available when the condensed consolidated half-year financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

Share-based payments

Estimating fair value for share-based payment transactions requires determination of the most appropriate valuation model, which depends on the terms and conditions of the instrument. This estimate also requires determination of the most appropriate inputs to the valuation model including the expected life of the share option or appreciation right, probability of milestone, employee turnover and reasonable estimate assumptions. The Group measures the cost of cash-settled transactions with employees using the fair value at the date when the grant is made using an appropriate valuation model. For cash-settled share-based payment transactions, the liability needs to be remeasured at the end of each reporting period up to the date of settlement, with any changes in fair value recognised in the profit or loss. This requires a reassessment of the estimates used at the end of each reporting period. For the measurement of the fair value of equity-settled transactions with employees the Group applies milestone probabilities to the share price at issue date while employee options use the fair value at the grant date.

(g) Segment reporting

For management purposes, the Group is organised into one main operating segment which involves the development and licensing of its proprietary flame retardant (FR) and phase change material (PCM) chemistries, reactive surface treatment (RST) technologies, and selling its specialized chemistry to customers. All of the Group's activities are interrelated and discrete financial information is reported to the Chief Executive Officer (Chief Operating Decision Maker) as a single segment. Accordingly, all significant operating decisions are based upon analysis of the Group as one segment. The financial results from this segment are equivalent to the financial statements of the Group as a whole.

(h) Going concern

The consolidated half-year financial statement has been prepared on a going concern basis which assumes the realisation of assets and extinguishment of liabilities in the normal course of business.

3. REVENUE

	Consolidated	
	31 December 2017 ($)	31 December 2016 ($)
Sale of goods	8,736,176	11,193,372
Interest income	5,206	8,795
Grant income	-	209,837
	8,741,382	11,412,004

4. CASH AND CASH EQUIVALENTS

For the purpose of the half-year cash flow statement, cash and cash equivalents are comprised of the following:

	Consolidated	
	31 December 2017 ($)	30 June 2017 ($)
Cash at bank and in hand	17,272,952	3,409,783
	17,272,952	3,409,783

5. CONTRIBUTED EQUITY

(a) Shares Issued

The number of ordinary shares on issue at 31 December 2017 is 340,737,998 (30 June 2017: 303,827,998).

Movements in Share	**31 December 2017**	
	Number	**$**
Balance of ordinary shares at beginning of period	303,827,998	52,820,041
Shares issued on conversion of options	2,425,000	456,900
Employee share plan	185,000	71,225
Share to be issued	-	263,772
Capital raising	34,300,000	12,005,000
Capital raising costs	-	(632,659)
Balance of ordinary shares at end of period	340,737,998	64,984,279

(b) Director's shares

During the period the Group issued a private placement of 34,300,000 shares at a value of $12,005,000. As part of this placement, Directors of the Company elected to purchase 785,718 shares totalling $275,000. As required by ASX Listing Rules section 10.11, this allotment is subject to shareholder approval. At 31 December 2017 this approval has not been received and as such, the shares have not yet been allotted and no payment for the shares has been received from the Directors. As such, a receivable for the balance of the shares has been recognised in the accounts as well as a corresponding increase in share capital at 31 December 2017.

(c) Share Options Issued

At 31 December 2017, 6,916,626 (30 June 2017: 6,916,626) free attaching unlisted options were outstanding and 2,400,000 (30 June 2017: 6,575,000) share-based payment options were outstanding. 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.

Movements in Share Options

2017	Grant date	Exercise Price	Expiry date	Balance at beginning of period	Granted during the period	Exercised during the period	Expired during the period	Balance at end of period
Unlisted options	01/09/14	$0.18	31/08/17	175,000	-	(175,000)	-	-
Unlisted options	13/05/15	$0.70	31/12/17	500,000	-	-	(500,000)	-
Unlisted options	13/05/15	$0.80	31/12/17	1,000,000	-	-	(1,000,000)	-
Unlisted options	20/05/15	$0.13	31/08/17	30,000	-	(30,000)	-	-
Unlisted options	06/05/15	$0.75	07/05/18	6,916,626	-	-	-	6,916,626
Unlisted options	06/08/15	$0.16	31/08/17	30,000	-	(30,000)	-	-
Unlisted options	01/10/15	$0.75	30/09/20	1,500,000	-	-	-	1,500,000
Unlisted options	04/11/15	$0.18	31/08/17	1,065,000	-	(1,065,000)	-	-
Unlisted options	09/11/15	$1.207	09/11/17	125,000	-	-	(125,000)	-
Unlisted options	09/11/15	$1.314	09/11/17	125,000	-	-	(125,000)	-
Unlisted options	26/02/16	$0.20	31/08/17	1,125,000	-	(1,125,000)	-	-
Unlisted options	04/11/16	$0.75	04/11/19	300,000	-	-	-	300,000
Unlisted options	04/11/16	$1.25	04/11/19	300,000	-	-	-	300,000
Unlisted options	04/11/16	$1.75	04/11/19	300,000	-	-	-	300,000
				13,491,626	-	(2,425,000)	(1,750,000)	9,316,626

(d) Performance Rights Issued

The number of performance rights on issue at 31 December 2017 is 1,324,000 (30 June 2017: Nil).

Movements in Performance Rights

	31 December 2017 Number	31 December 2017 $
Balance of performing rights at July 1, 2017	-	-
Performance rights forfeited	-	-
Performance rights converted to shares	-	-
Performance rights issued	1,324,000	174,916
Balance of performance rights at December 31, 2017	1,324,000	174,916

During the six-month ended 31 December 2017, no performance rights were forfeited or converted.

6. SHARE-BASED PAYMENTS

(a) Recognised share-based payment expenses – ordinary shares

2017	31 December 2017 Number	31 December 2017 Value per option $	31 December 2017 $
Shares were issued as part of employee benefit to operational staff under the Company's Employee Share Plan approved by Shareholders on 21 November 2016	185,000	0.385	71,225
			71,225

(b) Recognised share-based payment expenses – performance rights

Performance rights were issued as part of employee incentives to operational and management staff under the Company's Performance Rights Plan approved by Shareholders on 21 November 2016.

Based on the assumptions set out below, the performance rights issued during the period were ascribed to the following value:

Grant date: 16 November 2017
Market price of shares: A$0.42
Price payable on vesting: Nil
Discount (probability – market-based and employment conditions): 69%
Value per performance rights: A$0.132
Total value of performance rights: A$174,916

Total share-based payments	246,141

7. Reserves

	Option premium reserve	Performance rights reserve	Foreign currency translation reserve	Total Reserve
Balance at 1 July 2017	7,203,859	759,360	1,009,994	8,973,213
Performance rights expense	-	174,916	-	174,916
Foreign currency translation differences arising during the year	-	-	(301,044)	(301,044)
Balance at 31 December 2017	7,203,859	934,276	708,950	8,847,085

8. PROPERTY, PLANT AND EQUIPMENT

Cost or valuation	Furniture & Equipment $	Leased assets $	Total $
Balance at 30 June 2017	2,359,501	1,120,181	3,479,682
Additions	17,551	156,946	174,497
Disposals	(18,953)	-	(18,953)
Foreign exchange movements	(32,957)	(19,431)	(52,388)
Balance at 31 December 2017	2,325,142	1,257,696	3,582,838
Depreciation and impairment			
Balance at 30 June 2017	594,905	442,857	1,037,762
Depreciation	126,012	56,537	182,549
Disposals	(6,217)	-	(6,217)
Foreign exchange movements	(7,687)	(6,888)	(14,575)
Balance at 31 December 2017	707,013	492,506	1,199,519
Net book value			
At 30 June 2017	1,764,596	677,324	2,441,920
At 31 December 2017	1,618,129	765,190	2,383,319

9. INTANGIBLE ASSETS

Patents and intellectual property	31 December 2017 ($)
Cost	
Balance at 1 July	279,143
Additions	-
Impairment	-
Foreign exchange movements	5,340
Balance at 31 December	284,483
Amortization and impairment	
Balance at 1 July	135,844
Amortisation	8,598
Impairment	-
Foreign exchange movements	2,865
Balance at 31 December	147,307
Net book value	
At 30 June 2017	143,299
At 31 December 2017	137,176

10. BORROWINGS

On September 29, 2017, the Company entered a senior secured credit facility with institutional lenders to increase working capital for purchase of materials required to fulfil sales orders. The USD$10 million facility carries a thirty-six-month term and 13.5% annual interest rate. The Borrowings have been measured at amortised cost, a gain or loss is recognised in profit or loss when the borrowings are derecognised or impaired, and through the amortisation process. The Company allocates interest payments over the term of the borrowings at a constant rate on the carrying value. $5 million of the proceeds from the funding was used to pay down the credit facility originated on December 30, 2016, which carried a shorter term, higher interest rate, and greater warrant coverage.

Derivative liability

Under the agreement, warrants will be issued up to 20% of the borrowings, with 47 cents exercise price, for a period of five years. The borrowing is a hybrid instrument with liability and derivative liability components. The warrants include an embedded derivative relating to the exercise price that needs to be measured at fair value and separated with changes in value being recorded in profit or loss. Derivative liability has been valued using a Black-Scholes option pricing model which approximates the results that would have been achieved by using a binomial lattice Monte Carlo simulation. Pricing model inputs include: exercise price (0.47), risk-free rate (2.12%), remaining term (4.75 years) and volatility (53.91%).

11. DIVIDENDS

No dividend has been declared or paid during the half-year or the previous corresponding period.

The Company does not have any franking credits available for current or future years, as it is not in a tax paying position.

12. SUBSEQUENT EVENTS

Other than details below and events disclosed elsewhere in this report, no other event has occurred since the end of the financial year that may have a significant impact on the financial position of the Group:

(a) Share Purchase Plan

After the end of the period on 18 January 2018, the Group concluded its Share Purchase Plan announced on 11 December 2017 resulting in applications being received by 276 registered shareholders for 4,705,600 shares totalling $1,646,960.

13. COMMITMENTS AND CONTINGENCIES

(a) Commitments

There have been no material changes to the commitments as disclosed in the annual report to 30 June 2017.

(b) Contingencies

There have been no material changes to the contingencies as disclosed in the annual report to 30 June 2017.

DIRECTORS' DECLARATION

(a) the financial statements and notes of the Group are in accordance with the *Corporations Act 2001*, including:

(i) giving a true and fair view of the financial position as at 31 December 2017 and the performance for the half-year ended on that date of the Consolidated entity; and

(ii) complying with Accounting Standard AASB 134 *Interim Financial Reporting* and Corporations Regulations 2001;

(iii) there are reasonable grounds to believe that the Group will be able to pay its debts as and when they become due and payable.

On behalf of the Board

Dirk L. Van Hyning

Dirk Van Hyning
Chief Executive Officer
27 February 2018

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Independent Auditor's Review Report to the Members of Alexium International Group Limited

Report on the Half-Year Financial Report

Conclusion

We have reviewed the accompanying half-year financial report of Alexium International Group Limited (the Company) and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 31 December 2017, and 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 half-year ended on that date, a description of accounting policies, other selected explanatory notes, and the directors' declaration.

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the half-year financial report of Alexium International Group Limited does not give a true and fair view of the financial position of the Group as at 31 December 2017, and of its financial performance and its cash flows for the half-year ended on that date, in accordance with the *Corporations Act 2001*, including complying with Accounting Standard AASB 134 *Interim Financial reporting*.

Directors' Responsibility for the Half-year Financial Report

The Directors of the Company are responsible for the preparation of the half-year 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 half-year financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express a conclusion on the half-year financial report based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2410 *Review of a Financial Report Performed by the Independent Auditor of the Entity*, in order to state whether, on the basis of the procedures described, we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the *Corporations Act 2001* including giving a true and fair view of the Group's financial position as at 31 December 2017 and its performance for the half-year ended on that date, and complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*. As the auditor of Alexium International Group Limited, ASRE 2410 requires that we comply with the ethical requirements relevant to the audit of the annual financial report.

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A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Independence

In conducting our review, we have complied with the independence requirements of the *Corporations Act 2001.*

GRANT THORNTON AUDIT PTY LTD
Chartered Accountants

M J Hillgrove
Partner – Audit & Assurance

Perth, 27 February 2018