

28 September 2018

## **ALEXANDER MINING PLC**

### **INTERIM REPORT FOR SIX MONTHS ENDED 30 JUNE 2018**

Alexander Mining plc ("Alexander" or "the Company"), an AIM listed mining and mineral processing technologies company, announces its unaudited results for the six months ended 30 June 2018.

The Company's business objective is to become a successful company focused on the mining and processing of base metals which are integral to the delivery of technologies and products of the future. This will be achieved from the commercialisation of its proprietary mineral processing technologies and potential strategic partnerships in producing mines and through equity and/ or royalty positions in advanced projects.

#### **Highlights**

- Potential technology licensing and consulting agreement for the Kapili Tepe copper project at Sivas in Republic of Turkey
- Working closely with Proses Mühendislik investigating the commercial use of Alexander's base metals leaching technology in Turkey
- Progressing research and development initiatives for HyperLeach®, lithium and vanadium
- Aggressively investigating a range of potentially complementary corporate investment opportunities in the mining sector
- Adequate financial position and working capital to end of June 2019

#### **Chairman's Statement & Review of the Half-Year**

Dear Shareholders and Investors.

Herewith I take pleasure on behalf of your Board of Directors in presenting the Company's unaudited interim results for the half-year ended 30 June 2018, along with commentary on the operating environment and related outlook.

Once again, the period under review was filled with sentiment and fundamental driven sectoral performance in the global mining sector, whilst resource nationalism continues but has been tempered in some countries by government changes. In general, although the mining and natural resources investment sector remained positive, even within some commodities exhibiting flattening demand curves, we are clearly seeing, for the first time, that sentiment is dominant and even driving fundamentals. However, in the continuing volatile economic and political environment, precious metals prices, including gold and silver, continued to support the demand for risk hedging against rising government and public debt levels, US dollar uncertainty and fear of Fiat currency failure.

The world's leading economy, the USA, is also reasserting itself as a primary producer of much of what it needs to support the 'Buy USA' and industrial development policy

driven by the Trump government. This is being reflected notably on the changed economics of the metals production value chain in the Americas and within a long dormant now massively resurgent brownfield re-establishment of old mines, even from the 1800s, in some cases. New district size plays, primarily in precious metals but also in base metals, are being established with modern exploration techniques and step out drilling. Significantly, many of the base metal deposits are oxide in nature and so potentially amenable to Alexander's AmmLeach technology and we shall be monitoring these opportunities actively moving forward, while Mexico remains highly prospective for the Company.

Markedly, another realisation that is impacting seriously is that the days of drill, find, dig and produce within 3 to 5 years are long gone. Increased regulation and ESIA (Environmental & Social Impact Assessment) processes for exploring for, proving-up, exploitation permitting, then financing & constructing a producing mine can take well in excess of ten years and on average in many of the common mining jurisdictions at least 15 years. During that period some or all of the following will probably have occurred, government changes that alter the rules of engagement, demand for the metals/minerals change, and/or operating currency changes markedly against the US dollar market price.

This is significantly and inherently positive for Alexander as both existing and past closed operations look to 'squeeze the stone' for more via innovative processing of residues and waste (historically low grade sub-economic) materials. The Company's technologies are ideally situated to make the squeezing possible with relatively low capital expenditure, low operating expenditure and environmentally neutral impacts. We are aggressively pursuing such opportunities.

The price of base metals, Alexander's main area of activity, and related base metals equities continued to experience corrections and expected volatility but they remained range bound and in a rising general trend. LME stock depletion was sustained, even with observed flattening economic demand and global trade threats. There was continued significant capital inflow for exploration. The crypto-currencies investment bubble has deflated for now and we see a switch back to providing significant funding for the usual junior resource investment market.

Increased investment in exploration and development activity in the infrastructure commodities and energy storage, or battery metals, continued during the period and still underpins further potential price rises. More importantly, the consumer automobile industries are beginning to quickly realise that the much-stated ambitious adoption rates of electric vehicle ("EV"), primarily driven by political environmental agendas with no cognisance of the quantities of metals' production growth required to meet these rates, simply cannot be met. With some industry analysts forecasting an additional 30% to 40% increase in copper production (1.5Mtpa), 100% increase for Class 1 nickel production (1Mtpa) and an additional 2x to 3x current cobalt production (200ktpa to 300ktpa) for the passenger EV market alone, a gross under estimate of the supporting infrastructure and ignorance of the impact of commercial EVs, the prices of these metals in real terms are likely set to record levels.

One of the key metrics that demonstrates the current low potential for additional capacity being added, and therefore upward pressure on prices, is the 'Incentive Price' for development, assuming the resource is discovered and quantified. Studies show that establishment of new integrated copper, nickel and cobalt production operations needs incentive prices of US\$9,000/t, US\$22,000/t and US\$50,000/t respectively. This is just to consider investing further. With the average capital cost for these same metals using current processing methods, of US\$30k to US\$45k/tpa, US\$80k/tpa to

US\$120k/tpa, respectively, with cobalt usually a by-product of the others. Considering the commodity cycle positioning and project jurisdiction, metals prices need sustainability at even higher levels for resource companies to actually deploy capital and build the mines.

All of the above, assuming the capital could be raised, even at the low end of the scale, to produce the copper, Class 1 nickel, and cobalt requirement for EVs would need, US\$45bn, US\$80bn, and US\$5bn respectively. That's US\$130bn funding requirement from where? Car companies? Governments (AKA tax payer)? This is the exciting opportunity for Alexander's processing technologies as the significant potential reduction in capital and operating cost, along with significant environmental benefits could massively impact in lowering the incentive price and shorten time to production.

Therefore, considering all of the above, and with the key operating environment for the Company substantially unchanged from that which I reported in the 2017 Annual report, the outlook remains very positive for the Company's commercialisation efforts. Regardless of market sentiment, Alexander's management and Board have remained focused on developing or acquiring commercialisation opportunities for our technologies to release the embedded value in the Company's intellectual property.

In the reporting period, the Company continued to add granted patents in key mining jurisdictions to its portfolio of intellectual property and, where appropriate, make additional applications. In addition, the Company progressed with its R&D activities.

## **Financial**

The Company has continued to be assiduous in keeping its overheads to the minimum necessary, whilst maintaining required expenditure on business development and intellectual property protection. Expenses overall continue to be managed appropriately consistent with early value creation. The Company's cash position at 30 June was £662,043.

Based on the current budget, the Company should have adequate working capital through until the end of June 2019.

## **Commercialisation activities**

### **Turkey**

Our optimism in the last annual report that we may benefit from a change in the ownership of the Sivas copper mineral property ("Sivas") in the Republic of Turkey, where we had maintained interest and involvement in developing the optimum processing method potentially using Alexander technology, should be rewarded.

The Kapili Tepe copper project at Sivas in Republic of Turkey is on course to be acquired by Canadian company Deep South Resources Inc. ("DSR") subject to completion. This opportunity affords Alexander, under a technology licensing and consulting agreement announced in June 2018, to investigate the potential use of its technology in a full commercial scale processing plant. In addition, subject to Toronto Stock Exchange approval, Alexander will also receive 500,000 shares in DSR.

An exciting separate opportunity being discussed is to test the potential amenability of Alexander's suite of technologies for DSR's other project, the HIAB copper project in Namibia.

Per the announcement on 21 February 2018 regarding a commercial and technical partnership agreement with Proses Mühendislik, Danışmanlık, İnşaat ve Tasarım AS. ("Proses") in Turkey, Iran and the rest of the Middle-East, we have been working closely together. Particular effort has gone into investigating the commercial use of Alexander's base metals leaching technology in Turkey. The concept is that, subject to securing the necessary funding, Proses will design and construct a semi industrial scale processing plant using Alexander's technology. We look forward to reporting on progress in due course.

## **Research and Development**

With regards to the Company's R&D projects, overall progress has been somewhat slower than expected due to an ongoing shortage of skilled staff. This is anticipated to accelerate with the appointment of a new project metallurgist in Perth, Western Australia where most of our R&D is being conducted.

The project examining nickeliferous flotation tailings has completed initial characterisation of the tailings. The primary aim of this work is to demonstrate an economically viable route to produce battery quality nickel and cobalt sulphates directly from existing tailings. The secondary target is to demonstrate the potential for heap leaching nickel sulphide ores which would reduce the cut-off grade for most mines which currently use crushing, grinding and flotation to produce a concentrate. The capacity to process the concentrate on-site will also prove attractive to smaller producers of concentrate as it allows them to produce higher value products.

A new project has been started to examine the use of HyperLeach® as a method for recovery of copper from the low-grade porphyry halos which surround higher grade sulphide deposits. This work follows on from earlier successful work on flotation concentrates conducted in both Mongolia and Australia. There has been increasing interest in the in-situ leaching of metals. The HyperLeach® process has a number of attributes which match well with those required of an in-situ leaching system. The reagent is low cost, recyclable at reasonably low cost, operates at low pH and has a high capacity for metal solubility.

The increasing installation and use of renewable energy at remote mine sites make HyperLeach® increasingly attractive as an option for on-site value adding. The easy regeneration of the primary leachant using renewable energy should significantly reduce the operating costs compared to using conventional energy sources in remote locations. The potential to produce metal, or other value-added products at a remote mine site will also be beneficial by significantly reducing transport costs compared to ore or concentrates.

The significant R&D JV project to investigate the potential recovery of vanadium from amenable ores has progressed. John Webster Innovations Proprietary Limited ("JWI") has undertaken initial test work focused on Multicom Resources' Saint Elmo vanadium project in North Queensland, Australia, and we are awaiting the results.

## **Australia**

Unfortunately, as reported on 29 August 2018, Accudo's plan to proceed with a DFS on the potential use of our leaching technology under the existing licence agreement at a copper project in Australia and which was dependent upon it obtaining financing, has not happened.

## **Zambia**

Our past reported introducer's agreement with Duard Capital Ltd. ("Duard") for the potential introduction of commercial opportunities for Alexanders' leaching technologies in Zambia continues to be active on highly prospective junior projects for the potential recovery of copper and cobalt using mobile or semi-mobile containerised plants.

### **New opportunities**

As well as actively working on the commercialisation of our leaching technologies, given the mining industry background of the Company's directors and senior employees, we continue to aggressively investigate and develop a range of potentially complementary corporate investment opportunities in the mining sector.

### **Outlook**

All of the above continues to offer shareholders and potential investors strong fundamentals in the Alexander business and in the progressive project developments we are engaged in.

The Board remains firmly focused in executing its clearly defined business plan at all levels and leveraging the background and networks of the Company's directors and senior employees. We are also actively reviewing and submitting commercial proposals on several complementary opportunities of interest in the mining sector. However, we continue to remain prudent with regards to the deployment of the Company's cash.

As usual, I would like to thank you, Alexander's valued shareholders, for your continuing support and our employees, directors, consultants and advisers for their continued commitment for the value filled future we are targeting ahead.

Alan M. Clegg

Non-Executive Chairman  
28 September 2018

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## Consolidated income statement

	<b>Six months ended 30 June 2018 £'000</b>	Six months ended 30 June 2017 £'000	Year ended 31 December 2017 £'000
<b>Continuing operations</b>			
Revenue	-	-	-
Cost of sales	-	-	-
<b>Gross profit</b>	-	-	-
Administrative expenses	(174)	(196)	(329)
Research and development expenses	(103)	(65)	(101)
<b>Operating loss</b>	<b>(277)</b>	(261)	(430)
Finance income	1	-	-
Finance cost	-	-	-
<b>Loss before taxation</b>	<b>(276)</b>	(261)	(430)
Income tax expense	-	-	-
<b>Loss for the period from continuing operations</b>	<b>(276)</b>	(261)	(430)
Loss for the period from discontinued operations	-	-	-
<b>Loss for the period</b>	<b>(276)</b>	(261)	(430)
Basic and diluted (loss) per share (pence) from continuing operations:	<b>(0.01) p</b>	(0.02) p	(0.03) p

All components of profit or loss are attributable to equity holders of the parent.

## Consolidated statement of comprehensive income

	<b>Six months ended 30 June 2018 £'000</b>	Six months ended 30 June 2017 £'000	Year ended 31 December 2017 £'000
<b>Loss for the period</b>	<b>(276)</b>	(261)	(430)
<b>Other comprehensive income:</b>	-	-	-
<b>Total comprehensive loss for the period attributable to equity holders of the parent</b>	<b>(276)</b>	(261)	(430)

## Consolidated balance sheet

	As at 30 June 2018 £'000	As at 30 June 2017 £'000	As at 31 December 2017 £'000
<b>Assets</b>			
Property, plant & equipment	-	-	-
<b>Total non-current assets</b>	-	-	-
Trade and other receivables	33	36	37
Cash and cash equivalents	662	672	995
<b>Total current assets</b>	695	708	1,032
<b>Total assets</b>	695	708	1,032
<b>Equity attributable to owners of the parent</b>			
Issued share capital	15,352	14,951	15,352
Share premium	14,044	13,932	14,044
Translation reserve	-	-	-
Accumulated losses	(29,125)	(28,749)	(28,866)
<b>Total equity</b>	271	(134)	(530)
<b>Liabilities</b>			
<b>Current liabilities</b>			
Trade and other payables	424	574	502
Provisions	-	-	-
<b>Total current liabilities</b>	424	574	502
<b>Total liabilities</b>	424	574	502
<b>Total equity and liabilities</b>	695	708	1,032

## Consolidated statement of cash flows

	Six months ended 30 June 2018 £'000	Six months ended 30 June 2017 £'000	Year ended 31 December 2017 £'000
<b>Cash flows from operating activities</b>			
Operating loss – continuing operations	(277)	(261)	(430)
(Increase) / decrease in trade and other receivables	4	2	2
Increase / (decrease) in trade and other payables	(78)	(50)	(121)
Share option & Warrant charge	17	12	21
<b>Net cash outflow from operating activities</b>	<b>(334)</b>	<b>(297)</b>	<b>(528)</b>
<b>Cash flows from investing activities</b>			
Interest received	1	-	-
<b>Net cash inflow from investing activities</b>	<b>1</b>	<b>-</b>	<b>-</b>
<b>Cash flows from financing activities</b>			
Proceeds from the issue of share capital	-	710	1,264
Proceeds from issue of share options	-	-	-
<b>Net cash inflow from financing activities</b>	<b>-</b>	<b>710</b>	<b>1,264</b>
<b>Net increase / (decrease) in cash and cash equivalents</b>	<b>(333)</b>	<b>413</b>	<b>736</b>
Cash and cash equivalents at beginning of period	995	259	259
Exchange differences	-	-	-
<b>Cash and cash equivalents at end of period</b>	<b>662</b>	<b>672</b>	<b>995</b>

## Consolidated statement of changes in equity

	Share capital £'000	Share premium £'000	Shares to be issued £'000	Translation reserve £'000	Accumulated losses £'000	Total equity £'000
<b>At 1 January 2017</b>	<b>14,404</b>	<b>13,772</b>	-	-	<b>(28,501)</b>	<b>(325)</b>
Accumulated loss for period	-	-	-	-	(261)	(261)
Total comprehensive loss for the period attributable to equity holders of the parent	-	-	-	-	(261)	(261)
Share option costs	-	-	-	-	13	13
Shares issued	547	214	-	-	-	761
Share issue costs	-	(54)	-	-	-	(54)
<b>At 30 June 2017</b>	<b>14,951</b>	<b>13,932</b>	-	-	<b>(28,749)</b>	<b>134</b>
Accumulated loss for period	-	-	-	-	(169)	(169)
Total comprehensive loss for the period attributable to equity holders of the parent	-	-	-	-	(169)	(169)
Share option and Warrant costs	-	-	-	-	8	8
Shares issued	401	158	-	-	44	603
Share issue costs	-	(46)	-	-	-	(46)
<b>At 31 December 2017</b>	<b>15,352</b>	<b>14,044</b>	-	-	<b>(28,866)</b>	<b>530</b>
Accumulated loss for period	-	-	-	-	(276)	(276)
Translation Difference	-	-	-	-	-	-
Total comprehensive loss for the period attributable to equity holders of the parent	-	-	-	-	(276)	(276)
Share option and Warrant costs	-	-	-	-	17	17
Shares issued	-	-	-	-	-	-
Share issue costs	-	-	-	-	-	-
<b>At 30 June 2018</b>	<b>15,352</b>	<b>14,044</b>	-	-	<b>29,125</b>	<b>271</b>

### Notes to the interim financial information

#### 1. Basis of preparation

The interim financial information has been prepared in accordance with International Financial Reporting Standards (“IFRSs”) in force at the reporting date and their interpretations issued by the International Accounting Standards Board (“IASB”) as adopted for use within the European Union. The accounting policies, methods of computation and presentation used in the preparation of the interim financial information are the same as those used in the Group’s audited financial statements for the year ended 31 December 2017.

The financial information in this statement does not constitute full statutory accounts within the meaning of Section 434 of the Companies Act 2006. The financial information for the six months ended 30 June 2018 and 30 June 2017 is unaudited. The comparative information for the year ended 31 December 2017 was derived from the Group’s audited financial statements for that period as filed with the Registrar of Companies. It does not constitute the financial statements for that period. Those financial statements received an unqualified audit report, but contained a material uncertainty related to going concern.

#### Going Concern

In common with many mining, exploration and intellectual property development companies, the Company has raised finance for its activities in discrete tranches to finance its activities for limited periods. At 30 June 2018 the Company had a cash position of £662,043. The cash flow forecasts

prepared by the directors indicate that the Company should be able to cover its operating costs for a twelve months period, however the minimal headroom in the forecast together with the uncertainty surrounding the Group's ability to generate positive operating cash flows indicates a significant risk relating to going concern. It is currently anticipated that further funding will be required in the next twelve months.

On this basis, the directors have concluded that it is appropriate to draw up the interim financial information on the going concern basis. However, there can be no certainty that the Group will generate positive operating cash flows or further funding. This indicates the existence of a material uncertainty that may cast significant doubt on the ability of the Company and the Group to continue as a going concern and therefore, that it may be unable to realise its assets and discharge its liabilities in the normal course of business. The interim financial information do not include the adjustments that would result if the Company and Group were unable to continue as a going concern.

## 2. Loss per share

The calculation of loss per share is based on the weighted average number of shares in issue in the six months to 30 June 2018 of 1,888,730,149 (six months to 30 June 2017: 1,161,843,581 and year to 31 December 2017: 1,615,533,388) and computed on the respective loss figures as follows:

	<b>6 months 2018</b>		6 Months 2017		Full year 2017	
	<b>£'000</b>	<b>Per share</b>	£'000	Per share	£'000	Per share
(Loss) - continuing operations	<b>(276)</b>	<b>(0.01)p</b>	(261)	(0.02)p	(430)	(0.03)p

There is no difference between the diluted loss per share and the basic loss per share presented. Share options granted to employees, consultants and directors could potentially dilute basic earnings per share in the future, but were not included in the calculation of diluted earnings per share as they were anti-dilutive for the period presented.

At 30 June 2018, there were 150,200,000 (at 30 June 2017: 56,200,000; at 31 December 2017: 56,200,000) share options in issue that could have a potentially dilutive effect on the basic earnings per share in the future.

At 30 June 2018, there were 282,359,373-(at 30 June 2017: 42,359,373; at 31 December 2017: 282,359,373) share warrants in issue that could have a potentially dilutive effect on the basic earnings per share in the future.

## 3. Share Capital

Changes in issued share capital and share premium during the reporting period occurred as follows:

<b>Ordinary shares</b>	<b>Number of shares</b>	<b>Share capital</b>	<b>Share premium</b>
Balance at 1 January 2018	1,888,730,149	1,888,730,149	14,044,441
Balance at 30 June 2018	1,888,730,149	1,888,730	14,044,441
<b>Deferred shares</b>	<b>Number of shares</b>	<b>Deferred share capital</b>	
Balance at 1 January 2018	135,986,542	13,462,667	
Balance at 30 June 2018	135,986,542	13,462,667	

## 4. Share options and Warrants

All Share Option costs incurred are allocated to Accumulated Losses.

The Company had a total of 150,200,000 Share Options in issue during the period (12,900,000 with exercise prices of 4.92p per share, 43,300,000 with an exercise price of 0.22p per share and 94,000,000 with an exercise price of 0.15p per share), representing 6.47 per cent of the issued share capital of the Company on a fully diluted basis. Share option charges for the six months to 30 June 2017 amounted to £10,005 (2017: £8,265).

The Company had a total of 47,359,375 warrants in issue during the period for the provision of Broker services (7,359,375 with an exercise price of 0.4p per share, 40,000,000 with an exercise price of 0.15p per share). Warrant charges for the six months to 30 June 2018 amounted to £6,834 (2017: £3,546).

The Company had a total of 34,999,998 warrants in issue during the period granted to subscribers of the 2 October 2015 placing with an exercise price of 0.45 pence per share. No charge was made to equity for the six months ending 30 June 2018 (2017: £1,677).

The Company had a total of 200,000,000 warrants in issue during the period granted to subscribers of the 22 November 2017 placing with an exercise price of 0.225 pence per share.

## **5. Post balance sheet events:**

On 31 July 2018, Alexander announced that it had approved the grant of 4,000,000 new share options ("New Share Options") at an exercise price of 0.15 pence ("Exercise Price") to an important consultant to the Company.

Copies of these announcements are available to view on the Company's website at [www.alexandermining.com](http://www.alexandermining.com).

### Disclaimers

Neither the contents of the Company's website nor the contents of any website accessible from hyperlinks on the Company's website (or any other website) is incorporated into, or forms part of, this announcement.

This news release contains forward looking or future-oriented financial information, being information, which is not historical fact, including, without limitation, statements regarding potential results of metallurgical testwork, anticipated applications for the Company's intellectual property and discussions of future plans and objectives. Although the Company believes that the expectations reflected by such information are reasonable, these statements are based on assumptions and factors concerning future events that may prove to be inaccurate. Such statements are necessarily based upon a number of estimates and assumptions based on information available to the Company about itself and the business in which it operates. Information used in developing forward-looking information has been acquired from various sources including third party consultants, suppliers, regulators and other sources and is subject to numerous risks and uncertainties that could cause actual results and future events to differ materially from those anticipated or projected. Important factors that could cause actual results to differ materially from the Company's expectations are the continuing availability of capital resources to fund the commercialisation of Alexander's technologies; continued positive results from trials and applications of Alexander's AmmLeach® and HyperLeach® technologies and other factors as disclosed in Company documents filed from time to time. Management uses forward-looking statements because it believes they provide useful information to the shareholders with respect to proposed transactions involving Alexander, and cautions readers that the information may not be appropriate for other purposes and should not be read as guarantees of future performance or results. The Company disclaims any intention or obligation to revise or update such statements unless required by law.