



**Altech Chemicals**  
Limited

# QUARTERLY REPORT

March 2019

## Progress of Stage 1 Construction at Johor

- Stage 1 construction progressing as planned
- Site office, security post and safety systems established
- Bulk earthworks, levelling and compaction completed
- Foundation piling and foundation of workshop completed
- Steel for workshop procured and being sand blasted
- Retaining walls being established

## Exclusive Mandate with Macquarie Bank for US\$90 million Mezzanine Debt

- Macquarie Bank mandated as preferred Mezzanine lender
- US\$90 million indicative mezzanine debt term sheet
- Mezzanine lender's final technical advisor report issued
- Extensive review of the HPA process including visit to SMS group's facility in Dusseldorf, Germany
- Positive findings with satisfactory risk management
- Detailed HPA market review being undertaken by CRU
- Legal due diligence and in-house financial modelling has commenced

## HPA Coated Separators Update

- Transition to HPA coated battery separators clearly evident
- 47% increase in quarterly sales volumes from HPA coated separators
- W-Scope increasing HPA coated separator production capacity
- Leading Korean supplier of HPA coated battery separators

## Investor Site Visit in Johor

- Successful inaugural investor site visit to observe HPA plant construction progress
- Stage 1 construction progress observed
- Attendees included KfW IPEX-Bank, Macquarie Bank, CIMB Bank and Petra Capital
- Various potential equity and joint venture partners in attendance

## Capital Raising of A\$18 million to support Stage 2 construction

- New German investors anchor A\$18 million share placement
- Placement well supported by existing significant shareholders
- Stage 2 engineering and construction of HPA plant in Johor, Malaysia to now proceed

## Environmental management system implemented at HPA site

- Environmental and Social Management System (ESMS) implemented
- Baseline environmental monitoring for noise, air quality and water quality
- Will service both the construction and operations phases
- Policies and procedures in place



## Progress of Stage 1 Construction at Johor

Stage 1 construction at the Company's high purity alumina (HPA) project site in Johor, Malaysia, has progressed well during the quarter.

Advanced design and engineering have been completed allowing permits and approvals to be issued. The site development order was approved allowing site works to commence. Activities at site have now transitioned from the establishment phase well into the construction phase. Work is being conducted in accordance with the highest safety standards and there have been no safety incidents to report. Site Safety, Health & Environmental (SHE) procedures are all in place.

Initial site establishment activities are completed, with the site now fully fenced and secured. The site construction office has been erected; a security post has been installed; a vehicle wash down bay is established with sediment control; a site weather monitoring station is in place; and temporary ablutions are installed. A site safety induction process has been established, with all entry onto the site strictly controlled. Site security personnel have been inducted and the site is now monitored on a 24-hour, 7 day per week basis.

Removal of top soil from the site, bulk earthworks and site levelling is complete and soil compaction in most areas is finalised. A foundation piling rig was mobilised during the quarter, the foundation piling for the workshop building is already finished and the concrete footings for this building are in the final stages of establishment. Workshop steel (70 tons) has been purchased and has arrived at a nearby fabrication shop in preparation for sandblasting and off-site fabrication. Site and fabrication shop quality assurance have been supporting the steel fabrication.

A short video highlighting Stage 1 construction activities can be viewed via the following link:

<https://www.youtube.com/watch?v=sewJFlp6XY4>



Altech Chemicals Limited Johor HPA plant - conceptual illustration





### Exclusive Mandate with Macquarie Bank for US\$90 million Mezzanine Debt

In early March the Company announced that it has officially mandated Macquarie Bank (Macquarie) as the preferred mezzanine lender for its proposed Malaysian high purity alumina (HPA) plant.

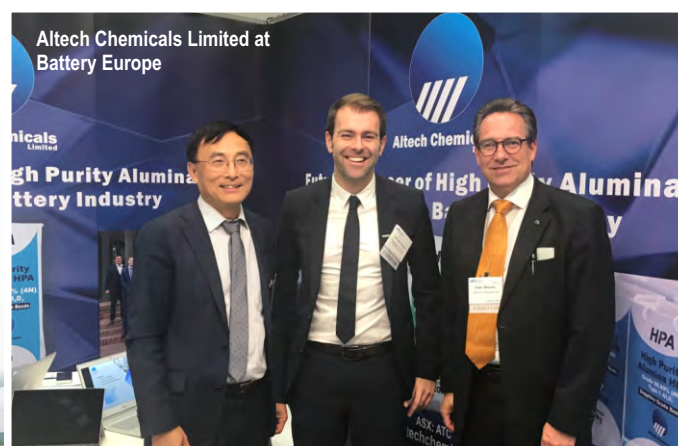
On 11 May 2018 Altech announced that it had received an indicative and non-binding mezzanine debt (subordinate to senior debt) term sheet for a facility amount of up to US\$90 million. Macquarie subsequently appointed an independent technical advisor to undertake detailed project due diligence, which also takes into consideration the extensive data base of prior due diligence work commissioned by the senior lender German government-owned KfW IPEX-Bank GmbH (KfW IPEX-Bank).

Advisian, the mezzanine lender's appointed technical advisor, conducted an extensive and thorough review of Altech's HPA project when responding to specific questions from Macquarie Bank. The report took six months to finalise and after extensive analysis, test work/data review and discussions with Altech and SMS group representatives, Advisian concluded with a positive report on the project's technical aspects and the project flowsheet. The report concluded that the Company has suitable proposed mitigation steps to manage the identified technical risk areas of the project. Altech's HPA project has now been the subject of two detailed independent technical reviews, both of which have culminated in positive and satisfactory conclusions.

The Company and Macquarie have now reached agreement on draft mezzanine debt terms and executed a mandate letter, which appoints Macquarie as the exclusive mezzanine debt provider, subject to its usual due diligence processes such as legal, market and technical. Completion of a mezzanine facility with Macquarie is conditional upon its view of all due diligence outcomes and agreement with KfW-IPEX Bank on inter-creditor arrangements.

Macquarie has now commissioned London headquartered CRU Consulting to conduct a HPA market report as part of its ongoing project due diligence, legal due diligence has also commenced. Macquarie's in-house financial modelling of the project has also largely been completed, the principal outstanding input is a HPA price forecast information from the CRU Consulting market analysis.

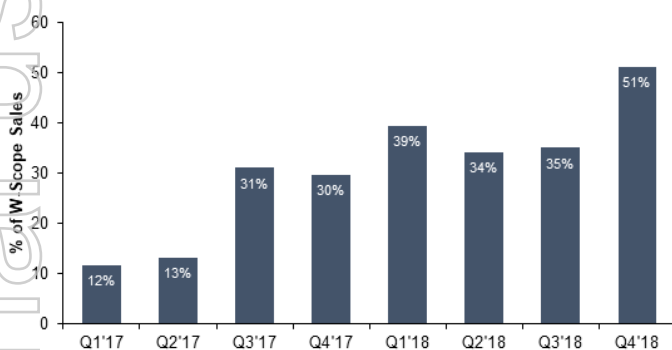
The mezzanine debt term sheet referred to in this quarterly report is indicative in nature; is non-binding; and contains the general terms of a proposed transaction. Any future commitment for the facility will be subject to and is contingent upon all internal approvals of the financial institution as well as the completion of detailed due diligence (including but not limited to legal, market and technical due diligence) and legally binding documentation and senior lender agreement. There is no certainty that the mezzanine project debt will be approved or a transaction concluded based on what is contemplated in the term sheet. The Company makes no representations or warranties whatsoever as to the outcome of the mezzanine debt process.



## HPA Coated Battery Separator Market Update

During the quarter, the Company provided an update on the transition by lithium-ion battery manufactures to high purity alumina (HPA) coated battery separator sheets, as is apparent from recently announced quarterly sales data by Japanese headquartered battery separator sheet manufacturer W-Scope (6619 JT), and from Altech's recent attendance at the Battery Japan 2019 international re-chargeable battery exhibition.

W-Scope HPA Coated Separator Sheet Sales Volumes  
(as % of total sales)



W-Scope reported in its 4th quarter 2018 results that as a proportion of total sales HPA coated separator sheets jumped to 51%, a volume increase of approximately 47% compared to an average sales volume of ~34% in the preceding four quarters (see Table above).



The transition by lithium-ion battery manufactures to HPA coated separators is primarily a function of advances in battery anode and cathode technology. As a result, battery energy storage capacity is increasing and battery operating temperature during charge and discharge is higher – to the point where traditional non-coated polymer separator sheets are reaching the limit of safe application, hence the transition to HPA coated separators which tolerate higher operating temperatures (refer Altech's ASX Announcement of 6 June 2018). The transition to HPA coated separators has been anticipated for some time, however the quarter 4, 2018 W-Scope sales data indicates that the transition may be progressing at a rate faster that previously envisaged.

W-Scope announced two years ago that it was doubling its HPA coated separator business due to its anticipation of increased demand for its coated separators from lithium-ion battery manufacturers that supply the electric vehicle and consumer goods industries. This investment appears to be well founded, as in its investor update published in mid-February 2019, W-Scope announced annual sales revenue guidance of ¥17.5bn for 2019, which compares to actual annual sales revenue of ¥8.7bn for 2018, a year-on-year increase of 100%. And for 2020, W-Scope has forecast a further increase in expected sales revenue that is 50% above its 2019 guidance, primarily on the back of capital expenditure for four additional HPA coated separator sheet production lines in response to coated separator sheet supply contracts associated with the electric vehicle industry. Nearly 60% of W-Scope's sales are to South Korea.

Most battery separator sheet manufacturers are business units within large conglomerates and/or are not listed on a stock exchange and consequently do not publish detailed sales data. W-Scope, as a public company with its shares quoted on the Tokyo Stock Exchange, does publish detailed sales data and Altech monitors this published information to assist it in understanding current trends in the battery separator sheet market. W-Scope has a ~10% share of the global battery separator sheet market.

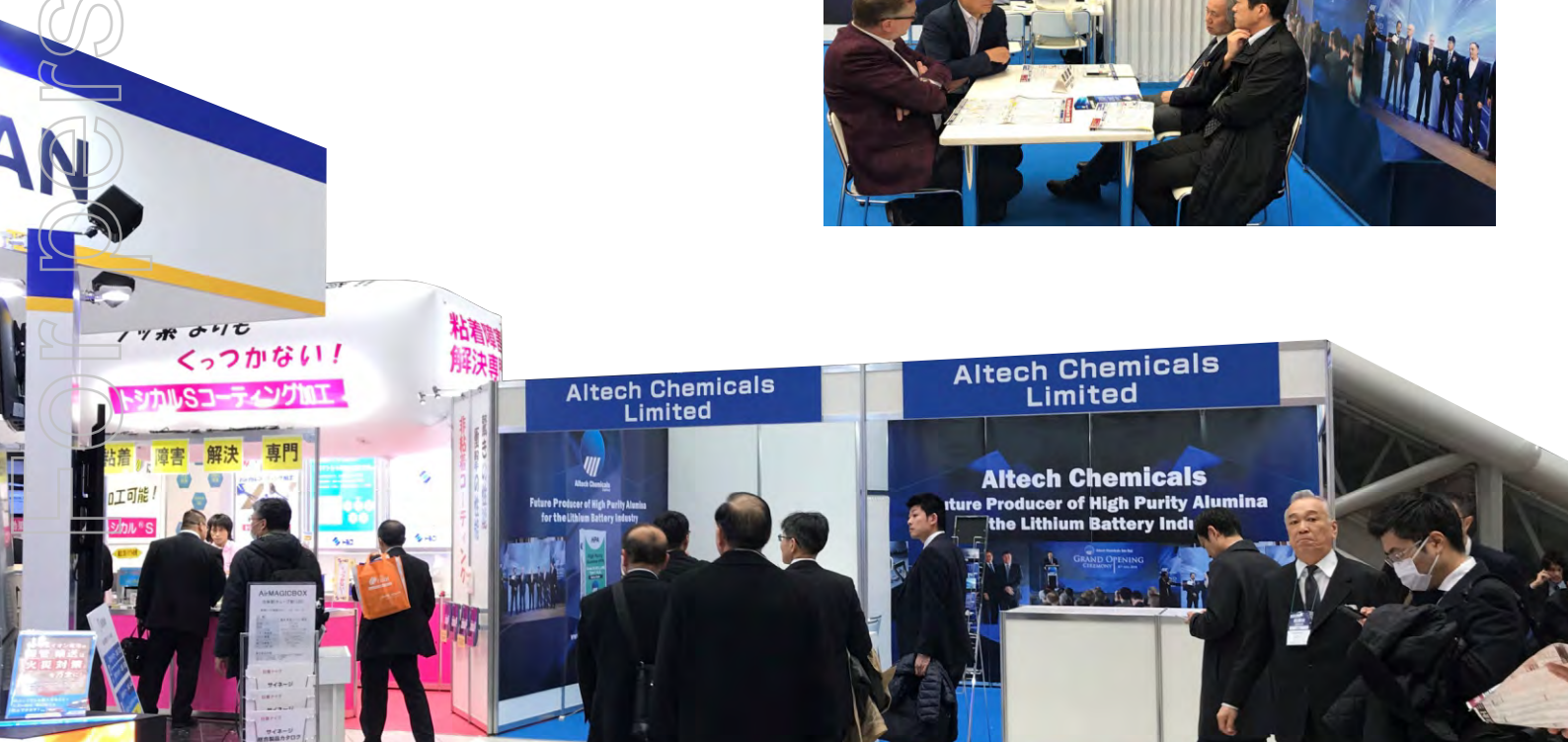
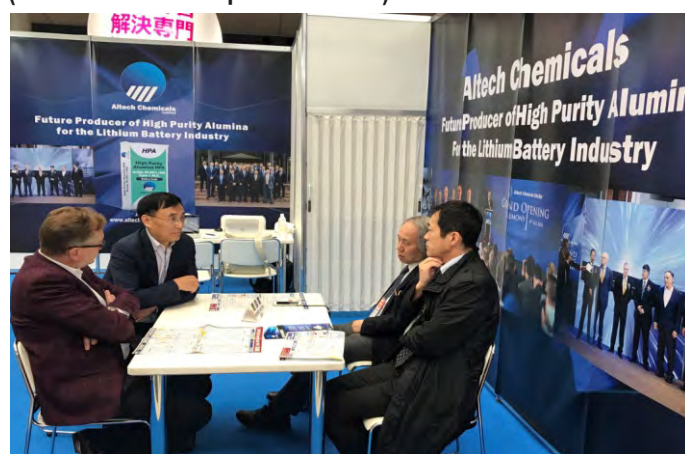


Altech was a recent exhibitor at the Battery Japan 2019 international re-chargeable battery exhibition in Tokyo, Japan. The Company continues to work with its exclusive off-taker, Mitsubishi Corp to build brand and product awareness. Delegates at the exhibition reported strong demand for HPA from South Korea and Japan. South Korean battery manufacturers like LG Chemicals produce around 10 different types of coated separators and use between 3,000tpa – 4,000tpa of HPA, currently its main HPA suppliers appear to be Sumitomo Chemicals and Nippon Light Metal. The other major battery producers in South Korea include SK Innovation and Samsung SDI, Samsung is also a major user of HPA for its coated separators.

At Battery Japan 2019, the Altech booth attracted considerable interest as there appears to be heightened concern about the perceived limited additional supply of high quality HPA from established producers. There was also feedback from battery manufacturers that HPA is now being incorporated within the lithium-ion battery cathode as it aids with battery temperature tolerance and reduces dendrite (crystalline mass) growth. Although this is an early stage innovation, it is nevertheless adding to HPA supply and quality concerns and it is another potential area of demand growth for HPA.

The global transition to electric vehicles now seems unstoppable. Toyota has announced that it is aiming to achieve annual sales of 5.5 million electrically driven vehicles by 2030; General Motors has plans to launch more than 20 electric vehicle models by 2023; Tesla, the highest profile electric vehicle manufacturer in the world is expecting between 700,000 and 1,000,000 of its electric vehicles to be sold in 2019; whilst German car-makers BMW and VW are expected to launch over 100 new electric vehicle models over the coming 6 years. The demand for HPA, which is currently estimated at 1.5kg – 1.7kg per electric vehicle, should be positively impacted by the migration to electric vehicles, underpinning the forecast rise in global HPA demand from current levels of ~26,000tpa to a conservative demand estimate of in excess of 60,000tpa by 2025. From recent discussions at various battery conferences Altech understands that the price of high quality 99.99% HPA in Japan remains unchanged at ~US\$40,000/tonne

**Altech Chemicals Limited booth at Battery Japan 2019  
(with Mitsubishi Representatives)**





## Investor Site Visit in Johor

During the quarter, the Company held a successful inaugural investor and stakeholder visit to the site of the Company's high purity alumina (HPA) plant in Johor, Malaysia. Stage 1 construction of the HPA plant commenced in late February 2019 and attendees were able to observe first-hand the progress made during the short ~9-week period since the initiation of site works.

The one-day visit commenced at the Company's Johor office located within the Tanjung Langsat Industrial Complex, where Altech managing director Iggy Tan provided a corporate update that covered the stage 1 construction plan; the status of project financing, corporate funding and the option to introduce a joint venture partner at project level; the plan to initiate stage 2 construction; and concluded with a site safety briefing and induction by the appointed EPC contractor SMS group of Germany. An inspection of the ~4 hectare HPA plant site and a detailed explanation of the stage 1 construction works followed – the HPA plant site is conveniently located approximately 300 metres from the Company's Johor office.

In attendance for the visit were Altech board chairman Luke Atkins, non-executive director Peter Bailey and alternate director Uwe Ahrens – also representing a major shareholder, the Melewar group. Other attendees included:

- Stefan Eitel (director metals & mining team) of KfW IPEX-Bank, who spoke to the delegation about the US\$ 190 million committed project senior debt facility;
- Mr Herbert Weissenbaeck (senior vice president strategic project development) of SMS group GmbH, the appointed EPC contractor for HPA plant construction and commissioning. Mr Weissenbaeck provided a comprehensive overview of the lump sum, fixed priced, turn key EPC contract and described the completion, throughput, process and quality guarantees that are incorporated in the construction contract. Mr Weissenbaeck explained that whilst such guarantees are unusual for a first-of-kind plant, SMS's confidence in providing the guarantees comes from in excess of 10-years of internal test work and studies at its own laboratory on the kaolin to high purity alumina hydrochloric acid process that Altech will employ in its HPA plant.









# Quarterly Report

March 2019

- Managing director of Petra Capital, Mr George Marias. Petra Capital is an independently owned wholesale stockbroking firm. Petra Capital has been supporting Altech and its HPA project with access to capital in the Australian and international equity markets for more than two years. Mr Marias was impressed with construction progress at the site and the excellent infrastructure and facilities that the large Tanjung Langsat Industrial Complex provides.

- A Macquarie Bank representative – as part of its detailed project due diligence for a proposed US\$90m mezzanine debt facility. Altech announced 8 March 2019 that it had signed an exclusive mandate with Macquarie as its preferred mezzanine lender. The bank's appointed adviser (Advisian) has now completed its technical review of the project and the bank has initiated a market review having appointed London firm CRU Consulting, and is progressing with legal reviews and the appointment of Australian, Malaysian and German legal firms.

- Representatives from CIMB bank, Kuala Lumpur. The bank is mandated to introduce potential Malaysian and South Asian joint venture partners and/or equity investors for the project.

- Representatives of a number of private equity groups, battery manufacturers and specialty materials industry participants from Malaysia, Singapore, South Korea and Hong Kong, as potential investors were also in attendance.

- Other participants included the representatives from a variety of predominantly Malaysian professional service providers such as legal, taxation and audit; representatives from existing institutional shareholders; selected media; and Altech staff from its Perth office.

For most stakeholders and investors the site visit was their first time to visit the plant location and the Tanjung Langsat Industrial Complex. For some attendees it was their first visit to Malaysia and to Johor, many expressed their surprise at the scale of industrial development in Johor, the established infrastructure and services that are available, and the ease of transit from Singapore's Changi Airport (where most arrived) to Johor. For potential equity and/or joint venture investors the visit was an important part of their investment decision process – as the Company continues to explore the possibility of selling up to 50% of the project to an industry joint venture partner to share the final project equity funding. The Company plans to conduct regular investor and stakeholder site visits as HPA plant construction activities continue.





## Capital Raising of A\$18 million to support Stage 2 construction

In mid-April 2019, the Company announced the successful completion of an A\$18 million (before costs) share placement ("placement"). The placement was well-subscribed demonstrating support for the Company's HPA project.

The placement was anchored by two German institutional investors (Deutsche Balaton and Delphi), each will subscribe to A\$5.425 million worth of new Altech shares. Also, existing Altech shareholders SMS Investments and the Melewar Group have each agreed to subscribe to A\$2.0 million of new shares (subject to shareholder approval in the case of Melewar). SMS group remain committed to an equity contribution of ~A\$13 million at project financial close. A number of other professional and sophisticated investors also supported the placement.

Proceeds from the placement are applied towards the commencement of Stage 2 engineering and construction of the Company's high purity alumina (HPA) plant in Johor, Malaysia and for administration and working capital purposes. Petra Capital acted as lead manager and bookrunner to the placement.

In Johor, Stage 2 engineering and construction works will include: third party and supplier engineering, advancing various civil loads in the plant and advancing current Stage 1 activities. Altech is continuing with its strategy of advancing construction of the HPA plant in parallel with project financial close, thereby ensuring that project momentum is maintained.

Placement shares will be issued at a price of \$0.1085 per share, which represents a 16.5% discount to the price of the Company's shares as traded on the ASX at the close of trade on 11 April 2019 (the day prior to initiation of a trading halt).

Key participants in the share placement are:

Deutsche Balaton AG:	A\$ 5.425 million
Delphi Unternehmensberatung AG:	A\$ 5.425 million
Melewar Group:	A\$ 2.000 million
SMS Investments:	A\$ 2.000 million
<b>Total for key participants</b>	<b>A\$14.850 million</b>

A total of 167,993,857 shares will be issued for the placement in two tranches. 131,127,497 shares were issued on 26 April 2019 in accordance with the Company's available placement capacity as follows:

- Under ASX Listing Rule 7.1 73,871,498 ordinary shares
- Under ASX Listing Rule 7.1A. 57,255,999 ordinary shares

The remaining 36,866,360 ordinary shares (\$4.0 million) are expected to be issued in early June 2019 following a general meeting of shareholders, where shareholder approval will be sought for the issue of the shares to the following parties (or their associates):

- Tunku Yaacob Khyra (Melewar group) a director of the Company: \$2.0 million (18,433,180 shares); and
- SMS group (appointed EPC contractor for HPA plant construction): \$2.0 million (18,433,180 shares).

Traditionally, whenever the Company has conducted a share placement it has offered all shareholders the opportunity to acquire shares at the same price as the placement shares via a Share Purchase Plan (SPP). The Australian Securities and Investment Commission (ASIC) Class Order by which the Company is able to offer a SPP limits shareholder participation in a SPP to once per 12-month period to a maximum of \$15,000 per shareholder. Because the Company last conducted a SPP in July 2018, a SPP will not be offered in conjunction with this placement.

Altech managing director, Mr Iggy Tan said, "The Company is extremely pleased with the support that it has received for the placement. We are delighted to welcome German strategic investors' Deutsche Balaton and Delphi which will have a combined 13.6% shareholding in the Company once the placement is completed. The placement was also well supported by existing substantial shareholders, including SMS Investments and the Melewar Group.



## Capital Raising of A\$18 million to support Stage 2 construction (cont.)

At our Malaysian HPA site, Stage 1 construction (majority pre-paid) is progressing well and SMS group's construction team is making solid progress. We are keen to maintain construction momentum at the site whilst project finance is being finalised.

After many months of extensive scrutiny, in February 2019 a positive report with a "no fatal flaws" finding on the HPA project was received from the technical consultant appointed by proposed Mezzanine debt provider Macquarie Bank (Macquarie). Altech has since signed a mandate with Macquarie appointing it as the exclusive mezzanine lender for a proposed facility of up to US\$90 million. Next steps will include non-technical project due diligence such as legal, detailed HPA market research, bank project financial modelling and inter-creditor discussions with KfW IPEX-Bank.

On the final project equity requirement, this will depend on amongst other things the final requirements of both lenders (KfW IPEX-Bank and Macquarie) and on the amount of construction work that has been pre-funded by Altech prior to project financial close. The Company continues to engage closely with a wide variety of investors (both existing and potential), including parties that have expressed interest in investing directly at the project level. Any direct project equity investment is likely to occur only after the mezzanine debt is finalised.

Whilst working towards project financial close, we see it as critical to maintain construction momentum at our HPA plant site, and are delighted that those who have participated in this placement also share this view."







## Environmental management commences on HPA site

The Altech team has been focused on developing its Environmental and Social Management System (ESMS) in preparation for both the construction and operations phases of the HPA project. The management system encompasses policies, management plans, procedures, and monitoring and reporting requirements which will ensure Altech Chemicals is able to meet both Malaysian regulatory and International standards for environmental, health and safety, and social impact compliance.

The ESMS framework has been audited by an international engineering team at Hatch, and is currently in the final stages of review by the technical advisors to Altech's senior lenders. In addition to development of the ESMS documentation, Altech has completed baseline environmental monitoring for noise, air quality and water quality at its project site in the Tanjung Langsat Industrial Complex. The data collected is a key input in assessing the ongoing impact of construction and operational activities at the site, and ensuring Altech's control systems meet and exceed compliance obligations.







**Altech Chemicals**  
Limited

# QUARTERLY REPORT

March 2019

## Company Snapshot

Altech Chemicals Limited (ASX:ATC) (FRA:A3Y)  
ABN 45 125 301 206

### FINANCIAL INFORMATION

(as at 31 March 2019)

Share Price:	\$0.13
Shares:	572.6m
Options:	Nil
Performance Rights*:	28.7m
Market Cap:	\$74m
Cash:	\$2.1m

### DIRECTORS

Luke Atkins	Non-executive Chairman
Iggy Tan	Managing Director
Peter Bailey	Non-executive Director
Dan Tenardi	Non-executive Director
Tunku Yaacob Khya	Non-executive Director
Uwe Ahrens	Alternate Director

### COMPANY SECRETARY/CFO

Shane Volk

### HEAD OFFICE

Suite 8, 295 Rokeby Road,  
Subiaco, Western Australia, 6008

T. +61 8 6168 1555

F. +61 8 6168 1551

E. [info@altechchemicals.com](mailto:info@altechchemicals.com)

W. [www.altechchemicals.com](http://www.altechchemicals.com)

## Schedule of Tenements

As per ASX Listing Rule 5.3.3, the Company held the following tenements (exploration and mining leases) as at 31 March 2019:

Tenement ID	Registered Holder	Location	Project	Grant Date	Interest end of quarter
E70/4718-I	Canning Coal Pty Ltd	WA Australia	Kerrigan	01/12/2015	100%
M70/1334	Altech Meckering Pty Ltd	WA Australia	Meckering	19/05/2016	100%

### ABOUT ALTECH CHEMICALS LTD (ASX:ATC) (FRA:A3Y)

Altech Chemicals Limited (Altech/the Company) is aiming to become one of the world's leading suppliers of 99.99% (4N) high purity alumina (HPA). HPA is a high-value, high margin and highly demanded product as it is the critical ingredient required for the production of synthetic sapphire. Synthetic sapphire is used in the manufacture of substrates for LED lights, semiconductor wafers used in the electronics industry, and scratch-resistant sapphire glass used for wristwatch faces, optical windows and smartphone components. There is no substitute for HPA in the manufacture of synthetic sapphire. Global HPA demand is approximately 25,315tpa (2016) and demand is growing at a compound annual growth rate (CAGR) of 16.7% (2016-2024), primarily driven by the growth in worldwide adoption of LEDs. As an energy efficient, longer lasting and lower operating cost form of lighting, LED lighting is replacing the traditional incandescent bulbs. Current HPA producers use expensive and highly processed feedstock materials such as aluminium metal to produce HPA. Altech has completed a Final Investment Decision Study (FIDS) for the construction and operation of a 4,500tpa HPA plant at the Tanjung Langsat Industrial Complex, Johor, Malaysia. The plant will produce HPA directly from kaolin clay, which will be sourced from the Company's 100%-owned kaolin deposit at Meckering, Western Australia. Altech's production process will employ conventional "off-the-shelf" plant and equipment to extract HPA using a hydrochloric (HCl) acid-based process. Production costs are anticipated to be considerably lower than established HPA producers. The Company is currently in the process of securing project financing with the aim of commencing project development in mid-2018.

### Forward-looking Statements

This report contains forward-looking statements which are identified by words such as 'anticipates', 'forecasts', 'may', 'will', 'could', 'believes', 'estimates', 'targets', 'expects', 'plan' or 'intends' and other similar words that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward-looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this report and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the directors and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this report will actually occur and readers are cautioned not to place undue reliance on these forward-looking statements. These forward-looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed or anticipated in these statements.

The mezzanine debt term sheet referred to in this report and previous ASX announcements: is indicative in nature; is non-binding; and contains the general terms of a proposed transaction. Any future binding commitment will be subject to and is contingent upon all internal approvals of the financial institution, as well as the completion of due diligence (including but not limited to legal, HPA market and technical due diligence) and the completion of legally binding documentation. There is no certainty that the mezzanine project debt facility will be approved or that any transaction will be concluded based on what was presented in the term sheet. The Company makes no representations or warranties whatsoever as to the outcome of the mezzanine debt process and/or the success of any future equity raising that may be undertaken to secure the balance of project funds required for the draw-down of senior project debt.

\*subject to vesting conditions



For personal use only



## Appendix 5B

### Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

**Name of entity**

ALTECH CHEMICALS LTD

**ABN**

45 125 301 206

**Quarter ended ("current quarter")**

MARCH 2019

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(4)	(41)
(b) development	(353)	(3,122)
(c) production	-	-
(d) staff costs	(254)	(1,009)
(e) administration and corporate costs	(424)	(1,343)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	15	80
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Deposits Paid	(3)	(4)
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,023)</b>	<b>(5,439)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(114)	(556)
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) HPA Plant (Stage 1 Construction pre-paid)	-	(9,101)



Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
2.2 Proceeds from the disposal of:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-
2.3 Cash flows from loans to other entities	-	-
2.4 Dividends received (see note 3)	-	-
2.5 Other (provide details if material)	-	-
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(114)</b>	<b>(9,657)</b>

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of shares	-	21,214
3.2 Proceeds from issue of convertible notes	-	-
3.3 Proceeds from exercise of share options	-	-
3.4 Transaction costs related to issues of shares, convertible notes or options	-	(1,353)
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	-	-
3.7 Transaction costs related to loans and borrowings (KfW IPEX-Bank Facility Fees)	(793)	(2,902)
3.8 Dividends paid	-	-
3.9 Other (provide details if material)	-	-
<b>3.10 Net cash from / (used in) financing activities</b>	<b>(793)</b>	<b>16,959</b>

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	4,054	261
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(1,023)	(5,439)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(114)	(9,657)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	(793)	16,959
4.5 Effect of movement in exchange rates on cash held		
<b>4.6 Cash and cash equivalents at end of period</b>	<b>2,124</b>	<b>2,124</b>

For personal use only



5. <b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	2,124	7,622
5.2 Call deposits		
5.3 Bank overdrafts		
5.4 Other (provide details)		
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>2,124*</b>	<b>7,622</b>

\* The company announced an \$18.0 million capital raising (share placement) on 16 April 2019

6. <b>Payments to directors of the entity and their associates</b>	Current quarter \$A'000
6.1 Aggregate amount of payments to these parties included in item 1.2	188
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	
Director remuneration (including superannuation contributions)	

7. <b>Payments to related entities of the entity and their associates</b>	Current quarter \$A'000
7.1 Aggregate amount of payments to these parties included in item 1.2	
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

For personal use only

## Mining exploration entity and oil and gas exploration entity quarterly report

8. <b>Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities		
8.2 Credit standby arrangements		
8.3 Other (please specify)		
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

--

9. <b>Estimated cash outflows for next quarter</b>	\$A'000
9.1 Exploration and evaluation	-
9.2 Development	(900)
9.3 Production	-
9.4 Staff costs	(320)
9.5 Administration and corporate costs	(420)
9.6 Other (Facility Fee – KfW IPEX-Bank)	(700)
9.7 Stage 1 & Stage 2 Construction payments	(5,000)
<b>9.7 Total estimated cash outflows*</b>	<b>(7,340)</b>

\* The company announced an \$18.0 million capital raising (share placement) on 16 April 2019

10. <b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2 Interests in mining tenements and petroleum tenements acquired or increased				

For personal use only



**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here: .....  
(Director/Company secretary)

30 April 2019  
Date: .....

SHANE VOLK  
Print name: .....

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

For personal use only