



**Altech Chemicals**  
Limited

## ASX ANNOUNCEMENT AND MEDIA RELEASE

11 October 2021

# ALTECH – NEW CORPORATE VIDEO *LITHIUM-ION BATTERY UPDATE*

Altech Chemicals Limited (Altech/the Company) (ASX: ATC) (FRA: A3Y) is pleased to advise that a new corporate video titled ***“Lithium-ion Battery Update”*** is now available for viewing on the Company’s web site: [www.altechchemicals.com](http://www.altechchemicals.com).

The video describes how Altech Chemicals is advancing its potentially game changing technology to enable metallurgical grade silicon to be combined with graphite as an anode material in lithium-ion batteries. The material has the potential to increase lithium-ion battery chargeability, life, performance and safety.

Altech managing director Iggy Tan commented that *“The Company believes its nano technology that coats silicon particles with a fine layer of alumina will resolve both the swelling and first-cycle-loss capacity problems that currently limit the use of metallurgical grade silicon in lithium-ion battery anodes. Research and development conducted by Altech has shown extremely promising results, initial battery testing was encouraging and further testing is ongoing. The Company is rapidly gaining confidence in its potentially game changing alumina coating technology. Altech’s 75% owned German subsidiary (Altech Industries Germany GmbH) has already commenced a pre-feasibility study for construction of 10,000tpa alumina battery materials coating plant in Saxony, Germany which would service the burgeoning European lithium-ion battery market.”*



Authorised by: Iggy Tan (Managing Director)

For more information, please contact:

**Corporate**

**Iggy Tan**

Managing Director  
Altech Chemicals Limited  
Tel: +61 8 6168 1555  
Email: [info@altechchemicals.com](mailto:info@altechchemicals.com)

**Shane Volk**

Company Secretary  
Altech Chemicals Limited  
Tel: +61 8 6168 1555  
Email: [info@altechchemicals.com](mailto:info@altechchemicals.com)

**Investor Relations (Europe)**

**Kai Hoffmann**

Soar Financial Partners  
Tel: +49 69 175 548320  
Email: [hoffmann@soarfinancial.com](mailto:hoffmann@soarfinancial.com)  
*Wir sprechen Deutsch.*

**About Altech Chemicals (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 (Al<sub>2</sub>O<sub>3</sub>) through the construction and operation of a 4,500tpa high purity alumina (HPA) processing plant at Johor, Malaysia. Feedstock for the plant will be sourced from the Company's 100%-owned kaolin deposit at Meckering, Western Australia and shipped to Malaysia.

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. Increasingly HPA is used by lithium-ion battery manufacturers as the coating on the battery's separator, which improves performance, longevity and safety of the battery. With global HPA demand approximately 19,000t (2018), it is estimated that this demand will grow at a compound annual growth rate (CAGR) of 30% (2018-2028); by 2028 HPA market demand is forecast to be approximately 272,000t, driven by the increasing adoption of LEDs worldwide as well as the demand for HPA by lithium-ion battery manufacturers to serve the surging electric vehicle market.



German engineering firm SMS group GmbH (SMS) is the appointed EPC contractor for construction of Altech's Malaysian HPA plant. SMS has provided a USD280 million fixed price turnkey contract and has proposed clear and concise guarantees to Altech for plant throughput and completion. Altech has executed an off-take sales arrangement with Mitsubishi Corporation's Australian subsidiary, Mitsubishi Australia Ltd (Mitsubishi) covering the first 10-years of HPA production from the plant.

Conservative (bank case) cash flow modelling of the project shows a pre-tax net present value of USD505.6million at a discount rate of 7.5%. The Project generates annual average net free cash of ~USD76million at full production (allowing for sustaining capital and before debt servicing and tax), with an attractive margin on HPA sales of ~63%. (Refer to ASX Announcement "Positive Final Investment Decision Study for 4,500TPA HPA project" dated 23 October 2017 for complete details. The Company confirms that as at the date of this announcement there are no material changes to the key assumptions adopted in the study).

The Company has been successful in securing senior project debt finance of USD190 million from German government owned KfW IPEX-Bank as senior lender. Altech has also mandated Macquarie Bank (Macquarie) as the preferred mezzanine lender for the project. The indicative and non-binding mezzanine debt term sheet (progressing through due diligence) is for a facility amount of up to USD90 million. To maintain project momentum during the period leading up to financial close, Altech has raised ~A\$39 million in the last 24 months to fund stages 1 and 2 of the plant's construction; stage 1 construction commenced in February 2019 with stage 2 completed at the end of June 2020.

**Forward-looking Statements**

This announcement 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 announcement 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 announcement 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.