

ASX ANNOUNCEMENT AND MEDIA RELEASE

30 August 2019

ALTECH – HPA PLANT CONSTRUCTION UPDATE AUGUST 2019

Highlights

- Majority of Stage 1 construction nearing completion
- Workshop building now complete
- OSD Tank walls finished and work underway on roof panel fabrication
- Electrical substation design approved and earthworks to commence shortly
- Stage 2 engineering activities have commenced

Altech Chemicals Limited (Altech/the Company) (ASX: ATC) (FRA: A3Y) is pleased to provide an update on the current status of construction activities at the Company's high purity alumina (HPA) plant site in Johor, Malaysia.

Maintenance workshop building: the installation of external wall cladding; a ventilation and roller door; and the internal mezzanine level (which will be used for spare-parts storage and for maintenance offices) have all been completed and there is now no outstanding work on the building structure (Figures 1 and 2). The internal fit-out and electrical works for the workshop are planned to commence in parallel with process building construction, which is currently envisaged to follow the completion of Stage 2.

On-site detention (OSD) storm water tanks: Construction of the tanks has progressed well, with all walls for the four tank zones now completed (Figure 3). Fabrication of the 84 precast concrete roof panels, which is being carried out on site, is approximately 50% complete. Installation of the first panels is now underway (Figures 4 and 5) and the OSD tank construction is expected to be finished by the end of October 2019.

Retaining walls: construction is complete with the exception of a 4-metre long section adjacent to the OSD tanks. This section shall be completed in parallel with the final construction stage of the OSD tanks, in October 2019.

Electrical substation: The design of the electrical substation building has now been approved by TNB (the national electrical utility of Malaysia), and detailed engineering drawings for fabrication and construction are being finalised. Preliminary excavation and earthworks are expected to commence during September 2019, with construction works expected to continue through to Q2-2020.

Stage 2 engineering activities are progressing well, with appointed EPC contractor SMS group now in final negotiations with a number of the key equipment package suppliers to complete third party engineering. Data from these engineering packages will be used to finalise civil loading calculations for final engineering of the process building structures, which will position these structures for construction.

A video showing latest construction work can be found at https://youtu.be/GurrrL29xXA



Altech Chemicals Limited ASX:ATC ABN 45 125 301 206 Suite 8, 295 Rokeby Road, Subiaco, Western Australia 6008 Australia

Figure 1 – Workshop Structure Completion



Figure 2 – Completed Maintenance Workshop





Altech Chemicals Limited ASX:ATC ABN 45 125 301 206 Suite 8, 295 Rokeby Road, Subiaco, Western Australia 6008 Australia
 Telephone:
 +61 8 6168 1555

 Facsimile:
 +61 8 6168 1551

 Website:
 www.altechchemicals.com

Figure 3 – OSD Tank Construction Progress



Figure 4 – OSD Tank Roof Panel Fabrication





Altech Chemicals Limited ASX:ATC ABN 45 125 301 206 Suite 8, 295 Rokeby Road, Subiaco, Western Australia 6008 Australia
 Telephone:
 +61 8 6168 1555

 Facsimile:
 +61 8 6168 1551

 Website:
 www.altechchemicals.com

Figure 5 – OSD Tank Roof Panel Installation



Figure 6 – Site View from Northern Western Boundary





Altech Chemicals Limited ASX:ATC ABN 45 125 301 206 $- \operatorname{end} -$

Suite 8, 295 Rokeby Road, Subiaco, Western Australia 6008 Australia
 Telephone:
 +61 8 6168 1555

 Facsimile:
 +61 8 6168 1551

 Website:
 www.altechchemicals.com

For more information, please contact: <u>Corporate</u> Iggy Tan Managing Director Altech Chemicals Limited Tel: +61 8 6168 1555 Email: info@altechchemicals.com

Shane Volk Company Secretary Altech Chemicals Limited Tel: +61 8 6168 1555 Email: info@altechchemicals.com Investor Relations (Europe) Kai Hoffmann Soar Financial Partners Tel: +49 69 175 548320 Email: 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 (Al2O3) 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%.

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 the commencement of Stage 1 and 2 of the plant's construction; Stage 1 construction commenced in February 2019 with Stage 2 now underway.

Altech recently announced the sale of an option to Frankfurt stock exchange listed Yubisheng Green Paper AG (since renamed Altech Advanced Materials AG (AAM)), whereby AAM can acquire up to a 49% interest in Altech's HPA project for USD100 million. AAM has commenced the process of securing the funds to enable it to exercise its option, which once complete, it is expected would be a catalyst for project financial close.

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. 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.



Altech Chemicals Limited ASX:ATC ABN 45 125 301 206 Suite 8, 295 Rokeby Road, Subiaco, Western Australia 6008 Australia Telephone: +61 8 6168 1555 Facsimile: +61 8 6168 1551 Website: www.altechchemicals.com