



Altech Chemicals
Limited

ASX ANNOUNCEMENT AND MEDIA RELEASE

18 March 2020

ALTECH – INDEPENDENT ASSESSMENT OF HPA PROJECT'S GREEN CREDENTIALS

Highlights

- Centre of International Climate and Environmental Research (CICERO) appointed by AAM
- Independent assessment of Altech's HPA project's green credentials
- CICERO's determination highly regarded
- Large pool of European green investor funds

Altech Chemicals Limited (Altech/the Company) (ASX: ATC) (FRA: A3Y) is pleased to announce that it has been advised by Frankfurt Stock Exchange listed Altech Advanced Materials AG (FRA: AMA1) (AAM), that AAM has recently appointed the Centre of International Climate and Environmental Research (CICERO) associated with the University of Oslo (Norway), to complete an independent determination that Altech's high purity alumina (HPA) project supports a low-carbon and climate resilient future – i.e. confirmation of the projects green credentials (refer ASX announcement of 28 February 2020 for details).

CICERO's determination is formally termed a *Second Opinion*. A *Second Opinions* is typically valued by ethical investors, such as those seeking to equity invest, or lend, to projects that are deemed environmentally friendly, reduce emissions and/or support a lower carbon society. CICERO is one of the world's leading providers of independent, research based evaluations, and for a third year running in 2019 CICERO received an award for being the best provider of external assessments for the green bond market.

As announced on 30 January 2020, an engagement agreement has been executed between AAM and a Swiss international investment bank to act as Placement Agent in relation to the issuance of equity or other equity instruments (securities) by AAM via private placement. This is scheduled to follow the re-introduction of the rights offer to AAM shareholders that was approved at a meeting of its shareholders on 12 March 2020. A positive *Second Opinion* for Altech's HPA project would potentially enhance the project's suitability for the large pool of European green investor funds, such as those that may participate in the green bond market for example.

Altech intends to produce HPA to be used for the production of synthetic sapphire for the manufacturing LEDs, and used in lithium-ion batteries required for electric vehicles. On 28 February 2020, the Company published results from its detailed "mine to gate" study that compared the greenhouse gas emissions and energy consumption of Altech's disruptive single step kaolin – HPA production method, to the incumbent bauxite – refinery – smelter – alkoxide HPA production process. The results of the study were that Altech's kaolin-alumina process was estimated to release 46% less greenhouse gas per tonne of HPA compared to the *alkoxide process*. In addition, Altech's HPA production process was estimated to reduce energy consumption by 41% per tonne of HPA.

The Company's process plant in Malaysia is designed to international environmental standards and to satisfy the Equator Principles for lenders, as is required by senior lender - German government owned KfW IPEX-Bank.

– end –

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

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.

In July 2019 Altech announced the sale of an option to Frankfurt stock exchange listed Youbisheng 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 is anticipated 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 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.