



Altech Chemicals
Limited

ASX ANNOUNCEMENT AND MEDIA RELEASE

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ALTECH – GERMAN BATTERY MATERIALS PROJECT TARGETS EU FEEDSTOCK SUPPLY

Highlights

- Graphite development and supply MoU executed with SGL Carbon
- High purity silicon supply MoU executed with Ferroglobe
- World leading suppliers of high-quality materials with focus on innovation and sustainability
- Support for Altech's development of new types of battery materials
- EU suppliers reduce feedstock related transport emissions and supply chain risks
- Potential for feedstock production to utilise extensive European renewable energy sources

Altech Chemicals Limited (Altech/Company) (ASX: ATC) (FRA: A3Y) is pleased to announce that two Memorandum of Understanding (MoU) have been executed by Altech Industries Germany GmbH (AIG) and Altech, with two European based suppliers of lithium-ion battery grade anode materials. The MoUs set out the basis for the parties to work together for the possible future supply of materials to a battery material plant that would be constructed by AIG in Saxony, Germany and which is currently the subject of a preliminary feasibility study (PFS).



For graphite, AIG and Altech have executed a MoU with SGL Carbon GmbH (SGL), one of the leading producers of graphite in Europe. SGL Carbon is supporting Altech's development of high purity alumina coated graphite material targeted for use by the lithium-ion battery industry (see ASX Announcement dated 29 April 2021). In addition, the non-binding MoU details the potential future relationship whereby SGL would supply uncoated synthetic graphite anode material to an AIG battery materials plant in Saxony, Germany. The indicative, non-binding volumes and prices that are prescribed in the MoU will be adopted in the AIG PFS financial model. SGL Carbon is a world leader in the development and production of carbon-based solutions and reported sales of 919 million Euros in 2020. Only SGL supplied graphite has been used by Altech in test work conducted at its Perth research and development laboratory.

For silicon, AIG and Altech have executed an MoU with Ferroglobe Innovation S.L. (Ferroglobe), a leading producer of high purity metallurgical silicon in Europe. The non-binding MoU details the relationship whereby Ferroglobe would supply silicon anode material to an AIG battery materials plant in Saxony, Germany. Ferroglobe is a leading producer of silicon metal with a proven ability to create new solutions and applications using state-of-the-art technology to drive innovation. Ferroglobe has the ability to produce high purity silicon, and is targeting the development of tailor-made silicon powders for use in the anode of lithium-ion batteries. Only silicon supplied by Ferroglobe has been used by Altech in test work conducted at its Perth research and development laboratory.

The importance of environmental considerations has previously been highlighted as a key consideration in the design of AIG's proposed battery materials coating plant (refer to ASX Announcement on 18 November 2021). The MoU executed with SGL and Ferroglobe not only establish the basis for the possible future supply of high-quality feedstocks suitable for the battery materials coating process, but also align with the objective to minimise the proposed plant's carbon footprint and overall environmental impact.

The supply of high quality graphite and silicon from these leading European based materials suppliers would also minimise transport emissions attributed to feedstock shipments, plus their respective production facilities have the potential to utilise Europe's extensive green electricity market. Importantly, these suppliers, will like AIG, will be governed by the same stringent European Union (EU) environmental regulations. Both companies have a strong corporate focus on sustainability and reducing the environmental impact of their operations. Finally, partnering with EU based feedstock suppliers is expected to reduce any potential future supply chain risks when compared to non-European suppliers.

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About Altech Chemicals (ASX:ATC) (FRA:A3Y)

Altech Chemicals Limited (ASX: ATC, "Altech" or "Company") is a specialty alumina technology and production company that has finalised Stage 1 and Stage 2 construction of its high purity alumina (HPA) plant in Johor, Malaysia, and continues with innovative research and development of its downstream alumina coating technology used to improve the battery life and performance in lithium-ion batteries. Altech's alumina coating technology is successful on both silicon and graphite particles, typical of those used in the anode of lithium-ion batteries, particularly within the burgeoning electric vehicle industry.

The Company has commenced a preliminary feasibility study (PFS) for the construction of a high purity alumina (HPA) battery materials coating plant in Saxony, Germany. The PFS is being undertaken by Altech's 75% owned German subsidiary, Altech Industries Germany GmbH (AIG). Work on the preliminary engineering design for the 10,000 tpa battery materials plant is in the final stages of completion. Altech has also commenced the green accreditation of the environmental credentials of the battery materials process.

Altech is further aiming to become one of the world's leading suppliers of 99.99% (4N) high purity alumina (Al_2O_3) 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 near surface 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 HPA plant 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. Stage 1 and Stage 2 early works construction has been completed on time and on budget.



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.