ASX ANNOUNCEMENT AND MEDIA RELEASE

29 May 2025

ALTECH - DNV COMPARISON STUDY ON CERENERGY® TECHNOLOGY VERSUS OTHER BATTERY TECHNOLOGIES

Highlights

- As part of funding due diligence plan
- Independent comparison study of CERENERGY® technology
- DNV was engaged by Altech
- DNV is one of the leading energy storage technical advisors
- CERENERGY® - Promising emerging battery technology

Altech Batteries Limited (ASX: ATC, FRA: A3Y) is pleased to announce that as part of its funding strategy and due diligence plan, an independent study has been conducted on the CERENERGY® technology versus alternative technologies such as lithium-ion, sodium-sulphur and vanadium flow batteries. DNV was engaged to produce an independent, high-level comparison report evaluating CERENERGY® technology against these alternative technologies. DNV is one of the leading energy storage technical advisors and specialises in the identification, evaluation, testing, and certification of battery energy storage systems worldwide.

The complete comparison report has been prepared specifically for Altech Batteries GmbH and is confidential. Nevertheless, Altech is pleased to publish the Executive Summary of the technology comparison at cell level in the following qualitative overview. Table 1 gives a high-level overview of the advantages and disadvantages for the listed characteristics in comparison to the most widely used technologies on the market against CERENERGY® sodium chloride solid state (SCSS) technology.

The DNV primary conclusion states "***CERENERGY® is one of the promising emerging technologies. Further improvements in terms of the achievable energy density, performance, and cost efficiency can be expected in the coming years***" (DNV, May 2025).

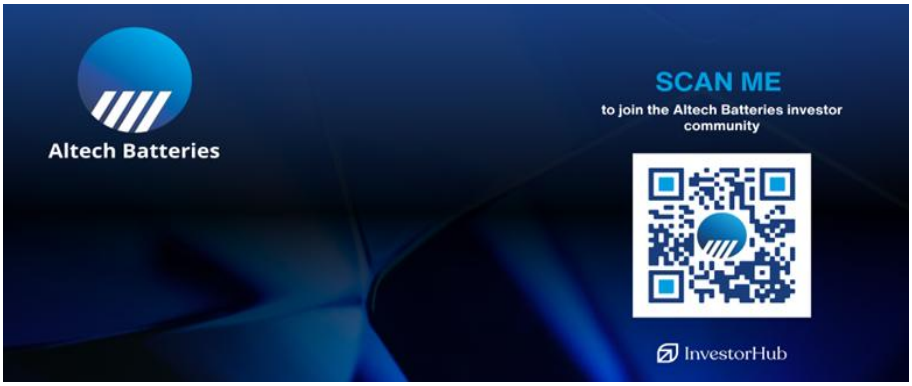
Table 1 – DNV Technology Comparison

Technology	C-Rate (Power)	Energy	Efficiency	Energy density	Lifetime	Cycles	TRL	Safety	Temp. Range	Discharge duration	Cost	self discharge	response time
Sodium Chloride Solid State (SCSS) with Sodium Nickel Chloride (Na-$NiCl_2$)	0.25C to 0.5C	0.25 kWh	85% to 92%	120 Wh/kg to 130 Wh/kg	15 to 30 years ***	7000 to 12000 cycles	mature medium to high	high	wide	2 h to several hours	medium €/kWh	no	hours** to some millisec.
Lithium Ion (Li-ion) with lithium iron phosphate (LFP)	0.5C to 2.0C	0.1 kWh to 1.0 kWh	90% to 98%	100 Wh/kg to 265 Wh/kg	15 to 20* years	6000 to 8000 cycles	mature High	low to medium	limited	1 h to 4 h	low €/kWh	< 3 %/month	some millisec.
Sodium-Sulfur (Na-S)	0.1C to 0.2C	1.4 kWh	70% to 80%	100 Wh/kg to 222 Wh/kg	15 to 20 years	4000 to 7000 cycles	mature High	medium to high	wide	6 h	high €/kWh	very low	hours** to some millisec.
Vanadium-Redox-Flow	0.25C to 0.5C	0.1 kWh to 0.25 kWh	60% to 75%	20 Wh/kg to 30 Wh/kg	10 to 20 years	12000 to 15000 cycles	mature medium to high	medium to high	limited	1 h to several hours	high €/kWh	very low (if electrolytes not circulated)	some millisec.

Authorised by: Iggy Tan (Managing Director)

Altech Batteries Interactive Investor Hub

Altech's interactive Investor Hub is a dedicated channel where management interacts regularly with shareholders and investors who wish to stay up-to-date and to connect with the Altech Batteries leadership team. Sign on at our Investor Hub https://investorhub.altechgroup.com or alternatively, scan the QR code below.



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About Altech Batteries Ltd (ASX:ATC) (FRA:A3Y)

CERENERGY® Batteries Project

Altech Batteries Ltd is a specialty battery technology company that has a joint venture agreement with world leading German government battery institute Fraunhofer IKTS ("Fraunhofer") to commercialise the revolutionary CERENERGY® Sodium Chloride Solid State (SCSS) Battery. CERENERGY® batteries are the game-changing alternative to lithium-ion batteries. CERENERGY® batteries are fire and explosion-proof; have a life span of more than 15 years and operate in extreme cold and desert climates. The battery technology uses table salt and is lithium-free; cobalt-free; graphite-free; and copper-free, eliminating exposure to critical metal price rises and supply chain concerns.

The joint venture is commercialising its CERENERGY® battery, with plans to construct a 120 MWh production facility on Altech's land in Saxony, Germany. The facility intends to produce CERENERGY® battery modules to provide grid storage solutions to the market.

ALTECH cerenergy®
Sodium Chloride Solid State Batteries

Silumina Anodes™ Battery Materials Project

Altech Batteries has licenced its proprietary high purity alumina coating technology to 75% owned subsidiary Altech Industries Germany GmbH (AIG), which has finalised a Definitive Feasibility Study to commercialise an 8,000tpa silicon alumina coating plant in the state of Saxony, Germany to supply its Silumina Anodes™ product to the burgeoning European electric vehicle market.

This Company's game changing technology incorporates high-capacity silicon into lithium-ion batteries. Through in house R&D, the Company has cracked the "silicon code" and successfully achieved a 30% higher energy battery with improved cyclability or battery life. Higher density batteries result in smaller, lighter batteries and substantially less greenhouse gases, and is the future for the EV market. The Company's proprietary silicon product is registered as Silumina Anodes™.

The Company is in the race to get its patented technology to market, and recently announced the results of a Definitive Feasibility Study for the construction of a 8,000tpa Silumina Anodes™ material plant at AIG's 14-hectare industrial site within the Schwarze Pumpe Industrial Park in Saxony, Germany. The European silicon feedstock supply partner for this plant will be Ferroglobe. The project has also received green accreditation from the independent Norwegian Centre of International Climate and Environmental Research (CICERO). To support the development, AIG has commenced construction of a pilot plant adjacent to the proposed project site to allow the qualification process for its Silumina Anodes™ product. AIG has executed NDAs with German and North American automakers and battery material supply chain companies.

Silumina Anodes™