Magnis Energy Technologies Ltd: Plans An Anode Active Material Manufacturing Plant For Lithium-Ion Batteries

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Sydney, Australia - Magnis Energy Technologies Ltd. (ASX:MNS) (FRA:U1P) (OTCMKTS:MNSEF) has announced plans to establish a Lithium-ion battery Anode Active Material (AAM) manufacturing plant utilising high quality and high purity natural graphite feedstock from its wholly owned Nachu graphite project in Tanzania.

This facility will deliver a secured supply of one of the most sustainable, cost-competitive, high-quality, and high-performance Coated Spherical Graphite (CSPG) anode products in the marketplace for the ever-growing US and European Lithium-ion battery market. The proposed AAM processing facility will strengthen Magnis' vision of vertically integrating its strategic assets across the lithium-ion battery value chain, as well as meeting the growing supply deficit of critical materials for the broader Lithium-ion battery market. Several locations within the United States are being investigated.

Magnis is in advanced discussions with several potential offtake partners to produce and supply AAM. Magnis has plans for the phased production of AAM, commencing with the operations of a demonstration plant followed by setting up a large-scale CSPG AAM production facility in the US in the next 3 to 5 years. The demonstration plant aims to supply the AAM for the qualification process with the OEMs and Lithium battery cell manufacturers.

Nachu Flake Graphite in Tanzania

Magnis' recent successful completion of the bankable feasibility study (BFS) update confirmed the viability of the Nachu Graphite Project in Tanzania to produce and supply high-purity graphite anode feedstock at a commercial scale for the rapidly growing Lithium- ion battery market.

Magnis has continuously demonstrated the production of a high performance, commercial Lithium-ion battery grade (>99.95%) CSPG-based AAM from its Nachu graphite feedstock in Tanzania with the help of its strategic technology partner, C4V.

Battery Anode Technology

C4V and Magnis have developed a proprietary graphite anode processing technology at its pilot facility located at the Binghamton University in New York operating over the last six years using lab scale equipment.

C4V's innovative and scalable processing technology which utilizes a purely mechanical downstream processing approach has eliminated the need of any harsh chemical and thermal purification producing significantly low-energy and low-carbon footprint anode product compared to traditionally produced products.

At the pilot facility, product has been constantly produced with higher yield (~70%) compared to the conventional graphite anode plant yield (~40-50%). Magnis' CSPG AAM produced at C4V's pilot facility has been validated in commercial graded cells by C4V and Magnis' subsidiary Imperium 3 New York (iM3NY), which recently commenced the commercial production of Lithium-ion battery cells at its Gigafactory facility in New York.

Magnis has an exclusive licensing agreement with C4V to use and commercialise the AAM processing technology globally.

Demonstration Plant

The demonstration plant will validate and demonstrate the scalability of Magnis' AAM processing technology at a commercial scale and will further facilitate the expansion to a large-scale production capacity.

High Performing Battery Results

Recent electrochemical battery performance of Nachu AAM has been extensively tested, validated and

qualified using commercial graded Lithium-ion battery cells. These commercial graded cells have had over 1000 cycles while retaining over 90% of its initial cell capacity which demonstrated an excellent lifespan of the Nachu CSPG AAM and its readiness for the next step of commercialisation.

Magnis Chairman Frank Poullas commented: "After many years of developing a process based on our Nachu Graphite we are excited to announce our plans to produce AAM materials."

"We are confident that the intrinsic high-purity Nachu graphite feedstock comprising of large crystal structure with minimal imperfections and C4V's unique processing technology will produce and deliver a superior AAM product compared to the competitors in the marketplace.

"With the huge shortage of AAM in the marketplace right now, we look forward to producing sustainable, cost competitive and high quality anode materials."

About Magnis Energy Technologies Limited:

Magnis Energy Technologies Ltd. (ASX:MNS) (OTCMKTS:MNSEF) (FRA:U1P) is involved in and has strategic investments in several aspects of the electrification supply chain including manufacturing of green credentialed lithium-ion battery cells, leading edge battery technology and high quality, high performance anode materials. The company's vision is to enable, support and accelerate the green energy transition critical for the adoption of Electric Mobility and Renewable Energy Storage.

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