

GLOSSARY OF TECHNICAL TERMS

In this document, unless the context otherwise requires, explanations and definitions of certain terms used in this document in connection with our Company and our business shall have the meanings set out below. The terms and their meanings may not always correspond to standard industry meaning or usage of these terms.

“ADP”	ammonium dihydrogen phosphate
“AGV”	automated guided vehicle
“AI”	artificial intelligence
“ammonium-based production process”	a manufacturing approach that relies on the chemical properties of ammonium ions or their associated salts to achieve a desired transformation, synthesis, or separation of materials
“CAGR”	compound annual growth rate
“CEI”	cathode electrolyte interphase, is a passivation layer that develops on the surface of the cathode in lithium-ion batteries
“CMC”	carboxymethyl cellulose, commonly used as a water-based binder, dispersant, and thickener in lithium-ion battery anode slurries. CMC itself has limited adhesive strength and is usually combined with SBR to form a composite binder system
“C-rate”	charge and discharge rate, an indicator for battery charge and discharge speed. A 1C rating means a battery can be charged or discharged completely in one hour at its rated capacity; a 4C rating means a battery can be charged or discharged completely in 15 minutes at its rated capacity
“COD”	chemical oxygen demand
“CV”	commercial vehicle
“continuous solvent-based production process”	a manufacturing method involving continuous synthesis and purification within a solvent system
“DCS”	distributed control system, is an automated control environment used to monitor and manage complex industrial processes
“DEC”	diethyl carbonate
“DMC”	dimethyl carbonate
“DTD”	1, 3, 2-dioxathiolane-2, 2-dioxide

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“DVB”	divinylbenzene
“EC”	ethylene carbonate
“EHS”	environment, health and safety
“electrolyte”	electrolyte for lithium-ion batteries
“EMC”	ethyl methyl carbonate
“energy density”	the amount of energy that can be stored within a given volume or given mass
“ERP”	enterprise resource planning system, an integrated software platform that centralizes and manages core business processes, including finance, human resources, manufacturing, supply chain, procurement and inventory, enabling real-time data visibility, resource optimization, and operational efficiency across the organization
“ESS”	energy storage system
“ESS battery”	a battery used for energy storage system
“EV”	electric vehicle, a type of vehicles powered fully or partially by battery, including battery electric vehicles and plug-in hybrid electric vehicles
“eVTOL”	electric vertical take-off and landing
“FePO ₄ ”	ferric phosphate
“FEC”	fluoroethylene carbonate
“Generation 3 LiFePO ₄ ”	this generation refers to cathode materials composed predominantly of micron-sized LiFePO ₄ particles. Generation 3 materials typically achieve compaction densities of around 2.50 grams per cubic centimeter
“Generation 4 LiFePO ₄ ”	this generation denotes cathode materials utilizing advanced particle engineering techniques, such as the fabrication of spherical or pseudo-spherical secondary particles. These secondary particles aggregate optimized primary particles, resulting in more uniform morphology and improved powder packing. Compaction density for Generation 4 materials generally falls around 2.60 grams per cubic centimeter
“Generation 5 LiFePO ₄ ”	this generation employs state-of-the-art engineering of nano-to-micro structured particles, highly uniform secondary particle agglomerates, and sophisticated control of surface coatings and elemental doping. Compaction density for Generation 5 materials generally falls around 2.70 grams per cubic centimeter

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“GW”	Gigawatt, a unit for measuring power, 1 GW=1 billion watts
“GWh”	gigawatt-hours, a unit of electric energy, 1 GWh=1 billion Wh
“kW”	kilowatt, a unit for measuring power, 1 kW=1,000 watts
“kWh”	kilowatt-hours, a unit of electric energy, 1 kWh=1,000 Wh
“compaction density”	the amount (grams) of materials that can be loaded in a given volume
“ICE”	internal combustion engine
“IoT”	internet of things
“kilotonne”	a unit of mass equal to 1,000 metric tonnes
“LFP battery”	a lithium-ion battery that uses lithium ferro phosphate (LiFePO_4) as the cathode material
“LiDAR”	a radar system that detects the position and velocity of a target by emitting laser beams
“LiF”	lithium fluoride
“life cycle”	the number of times (or cycles) a battery can charge and discharge until its retirement
“ LiFePO_4 ” or “LFP”	lithium ferro phosphate
“LiFSI”	lithium bis(fluorosulfonyl)imide
“ LiPF_6 ”	lithium hexafluorophosphate
“lithium-ion battery”	batteries that utilize lithium-ions as conductive ions that move between the anode and cathode, and charge and discharge through the mutual conversion of chemical energy and electrical energy
“liquid-state battery”	a type of rechargeable lithium-ion batteries that use liquid-state electrolyte
“MES”	manufacturing execution system, a software-based solution used in manufacturing to monitor, control, and optimize production processes on the shop floor
“MPC”	methyl propyl carbonate
“MWh”	megawatt-hours, a unit of electric energy, 1 MWh=1 million Wh

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“MVR”	mechanical vapor recompression
“NaPF ₆ ”	sodium hexafluorophosphate
“NMP”	n-methyl-2-pyrrolidone
“OA”	office automation system, a software solution that facilitates the management, automation, and streamlining of routine office tasks and workflows, such as document management, communication, scheduling, and information sharing, enhancing organizational efficiency and collaboration
“OQC”	outgoing quality control, a quality management process used in manufacturing and production to inspect and verify the quality of products before they leave the factory or facility for delivery to customer
“PAA”	polyacrylic acid
“PAN”	polyacrylonitrile
“PC”	propylene carbonate
“PEEK”	polyether ether ketone
“PF ₅ ”	phosphorus pentafluoride
“PI”	polyimide
“PLC”	programmable logic controller, a digital computing and operating electronic system specifically designed for use in industrial environment
“PLM”	product lifecycle management system, a collaborative tool that oversees the entire lifecycle of a product, from initial concept and design through to manufacturing, service, and disposal, supporting data management, version control, and process optimization to drive innovation and reduce time to market
“power battery”	rechargeable battery that provides energy for electric drive systems in transportations such as EVs, vessels and eVTOLs
“PS”	polystyrene
“PV”	passenger vehicle
“PVDF”	polyvinylidene fluoride, a non-aqueous binder that must be dissolved in organic solvents for use. Polyvinylidene fluoride can firmly bond cathode active materials and conductive additives onto aluminum foil current collectors, forming a stable electrode structure

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“QMS”	quality management system, a structured software-based framework that standardizes and manages quality policies, processes, and documentation throughout an organization, ensuring compliance with regulatory standards, continuous improvement, and consistent delivery of high-quality products or services
“roller kiln sintering process”	the thermal treatment of materials within a long, tunnel-shaped kiln equipped with multiple sets of rotating rollers. Materials, typically shaped as tiles, slabs, or flat ceramic products, are placed directly on the rollers and transported automatically through the kiln at a controlled speed. As the materials move through different temperature zones, they are exposed to carefully regulated high-temperature conditions, which induce the necessary chemical and physical changes for sintering
“rotary kiln sintering process”	the thermal treatment of raw materials within a long, cylindrical rotary kiln that is slightly inclined and rotates slowly around its axis. Materials are continuously fed into the upper end of the kiln, where they gradually progress towards the lower end as the cylinder rotates. During this movement, the materials are subjected to controlled, high-temperature conditions that drive chemical and physical transformations, culminating in sintering
“SBR”	styrene-butadiene rubber, commonly used together with Sodium Carboxymethyl Cellulose in the aqueous electrode coating process for lithium-ion battery anodes
“SEI”	solid electrolyte interphase, is a passivation layer that forms on the surface of the anode in lithium-ion batteries
“self-supply ratio”	the self-supply ratio indicates the percentage of specific materials used in our production processes that are sourced from our internal manufacturing operations. This ratio is calculated by dividing the amount of internally produced material utilized in production by the total quantity consumed, irrespective of origin, with all measurements based on pure substance content.
“skid-mounted modules”	a skid-mounted module is a pre-fabricated and factory-assembled package comprising mechanical, electrical, or process equipment, mounted on a steel base frame (the skid). The entire module is built off-site under controlled conditions, adhering to specified standards to ensure consistent quality and compatibility. The skid design enables the entire module to be easily moved, lifted, and installed as a single unit at the project site
“sodium-ion battery”	batteries that utilize sodium ions as conductive ions that move between the anode and cathode, and charge and discharge through the mutual conversion of chemical energy and electrical energy

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“solid-state battery”	a type of rechargeable lithium-ion batteries that use solid-state electrolyte
“solvent-based”	a process or method in which a liquid organic solvent serves as the primary medium for dissolving, transporting, or facilitating the reaction of other substances
“s.q. m”	square meter
“SRM”	supplier relationship management system, a specialized platform designed to manage, evaluate, and optimize interactions with suppliers, focusing on procurement processes, supplier performance, contract management and risk mitigation to strengthen supply chain relationships and value
“ternary battery”	a type of lithium-ion batteries that integrates a cathode mainly composed of three metallic elements, such as nickel, cobalt and manganese, or nickel, cobalt and aluminum
“TF”	trifluoromethanesulfonate
“tonne”	one tonne equals 1,000 kilograms
“TWh”	terawatt-hours, a unit of electric energy, 1 TWh=1 billion kWh
“VC”	vinylene carbonate
“wet process”	a process for separating and enriching metals by bringing them into contact with aqueous solutions or other liquids to induce chemical reactions
“Wh”	Watt-hour, a unit of electric energy
“Wh/kg”	Watt hour per kilogram
“WMS”	warehouse management system, a software application designed to optimize and manage the daily operation within a warehouse or distribution center