

GLOSSARY OF TECHNICAL TERMS

This glossary contains definitions of certain technical terms used in this document in connection with our business. These terms and their given meanings may not correspond to industry standard definitions or usage of these terms.

“black mass”	a powder-like substance that contains valuable metals
“BMS”	battery management system, an electronic system that monitors, manages and protects battery cells and modules
“cascade utilization”	the reuse (which may or may not involve additional processing) of used rechargeable batteries in another application
“cobalt”	a chemical element with the symbol Co and atomic number 27
“cobalt sulfate”	a compound with the formula CoSO_4 that is soluble and red-colored. It is widely used as a raw material for producing ternary battery
“crude black mass”	unprocessed black mass purchased from external suppliers, which requires further processing and refinement, distinct from the black mass manufactured in-house
“CTC”	cell to chassis, an advanced battery integration technology that integrates battery cells directly into the vehicle chassis, omitting intermediate modules and independent battery packs to optimize structural rigidity, space utilization and energy density
“CTP”	cell to pack, a battery packaging technology that assembles battery cells directly into the battery pack without intermediate module assembly, simplifying structure, improving system energy density and reducing overall weight and cost
“DCS”	distributed control system, an automated industrial control system for process monitoring and regulation
“downgraded battery cells”	battery cells failing to meet specified quality, performance or safety criteria
“dual carbon goal”	a national goal of reaching peak carbon emissions by 2030 and carbon neutrality by 2060 set by the PRC government
“EV”	electric vehicle
“electrode sheets”	sheet-shaped components in a battery that are formed by coating active materials onto a metal foil substrate, typically includes a cathode and an anode

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“EPR”	extended producer responsibility, a regulatory principle requiring manufacturers to take responsibility for the collection, recycling, or disposal of products after consumer use
“ERP”	enterprise resource planning
“ESG”	environmental, social and governance
“ESS”	energy storage system, a system that stores surplus electrical energy and releases stored power as needed for various power application scenarios
“GFA”	gross floor area
“GHG”	greenhouse gas
“Grade A battery cells”	lithium battery cells that meet the quality, safety, and performance specifications established by original equipment manufacturers, characterized by full rated capacity, consistent voltage levels, and low internal resistance
“graphite”	a soft, crystalline form of carbon
“Greenhouse Gas Protocol”	a globally recognized standard for measuring and managing greenhouse gas emissions
“hydrometallurgy”	the technique or process of extracting metals involving the use of aqueous solutions
“iron phosphate”	a compound with the formula FePO_4 that is a white, off-white monoclinic crystal powder, and is mainly used to synthesize lithium iron phosphate battery cathode materials
“ISO 14001”	Environmental Management System released by ISO
“ISO 45001”	Occupational Health and Safety Management System released by ISO
“ISO 50001”	Energy Management System released by ISO
“ISO 9001”	International Quality Management System released by ISO
“jet mill”	mechanical grinding equipment using high-speed air flow to produce fine powder materials
“KPIs”	key performance indicators, quantifiable metrics used to measure business and operational performance

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“LCO”	lithium cobalt oxide, a type of cathode material typically used in lithium batteries
“LFP”	lithium iron phosphate or lithium ferrous phosphate, a battery chemistry widely used in electric vehicles and energy storage systems
“lithium”	a chemical element with the symbol Li and atomic number 3
“lithium-ion”	charged lithium ionic species serving as the core charge carrier in rechargeable battery systems
“lithium carbonate”	a lithium compound with the chemical formula Li_2CO_3 that can be dissolved in dilute acid and is commonly used for lithium battery materials
“lithium battery”	a general term covering two core types of lithium batteries, namely rechargeable lithium-ion batteries and non-rechargeable lithium primary batteries. In lithium-ion batteries, lithium ions move from the negative electrode through electrolytes to the cathode during discharging and move reversely when charging, while lithium primary batteries can only discharge once and are incapable of being recharged for repeated use
“lithium manganese iron phosphate”	an advanced LFP-based battery chemistry that incorporates manganese to improve energy density while retaining safety characteristics
“metal salt”	inorganic compound containing metal ions, used as raw material in battery material production
“mining”	the extraction of useful minerals or other geological materials from the crust, from an orebody, vein or coal seam
“MWh”	megawatt-hour, unit of electrical energy output or storage capacity
“NCA”	nickel cobalt aluminium, a ternary lithium battery cathode material containing nickel, cobalt and aluminium, featuring high energy density and good cycling performance
“NCM”	nickel cobalt manganese, a nickel-based active material used in the cathode of lithium batteries made up of nickel, cobalt and manganese in varying proportions
“NCM523/622/811”	common industry specifications of NCM, where the numbers 523, 622 and 811 denote that the molar ratio of nickel, cobalt and manganese is 5:2:3, 6:2:2 and 8:1:1, respectively
“NEV”	new energy vehicles

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“nickel sulfate”	a compound with the formula NiSO_4 that is soluble and blue-green-colored. It is widely used as a raw material for producing NEV ternary battery
“OA”	office automation, a new office solution that combines modern office affairs with computer technology
“pack”	complete battery assembly including modules, BMS, thermal system and enclosure for end-use applications
“ppm”	parts per million, unit for measuring very low concentrations of substances or impurities
“production scraps”	waste and non-conforming materials generated throughout lithium battery manufacturing processes. These scraps contain various levels of valuable metals such as lithium, cobalt, nickel and manganese, and are collected for recycling and resource recovery
“regenerated LFP cathode materials”	regenerated LFP cathode materials restored and performance-recovered via professional treatment, conforming to battery production standards for direct reuse
“silicon-carbon electrodes”	an anode material combining silicon and carbon, designed to increase battery energy density by enabling higher lithium storage capacity
“SMM”	Shanghai Metal Market
“sodium sulfate”	a compound with the formula Na_2SO_4 that is soluble and white-colored
“SOH”	state of health, a measurement indicating the overall condition and remaining capacity of a battery compared to its original capacity, expressed as a percentage
“sq.m.”	square meter(s)
“tCO ₂ e”	tons of carbon dioxide equivalent, an unit measuring greenhouse gas emissions
“ternary battery”	a lithium battery that uses a cathode made from three key metals, typically nickel, cobalt and either manganese or aluminium, offering higher energy density
“ton”	1 ton equals to 1,000 kilograms

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“used battery” a lithium battery that has been put into actual operation, covering two categories: one that has reached the end of its original service life, and the other that is withdrawn from use prior to expiry. It can be reused, repurposed or recycled accordingly

“WMS system” warehouse management system, a software for inventory storage, tracking and logistics control