

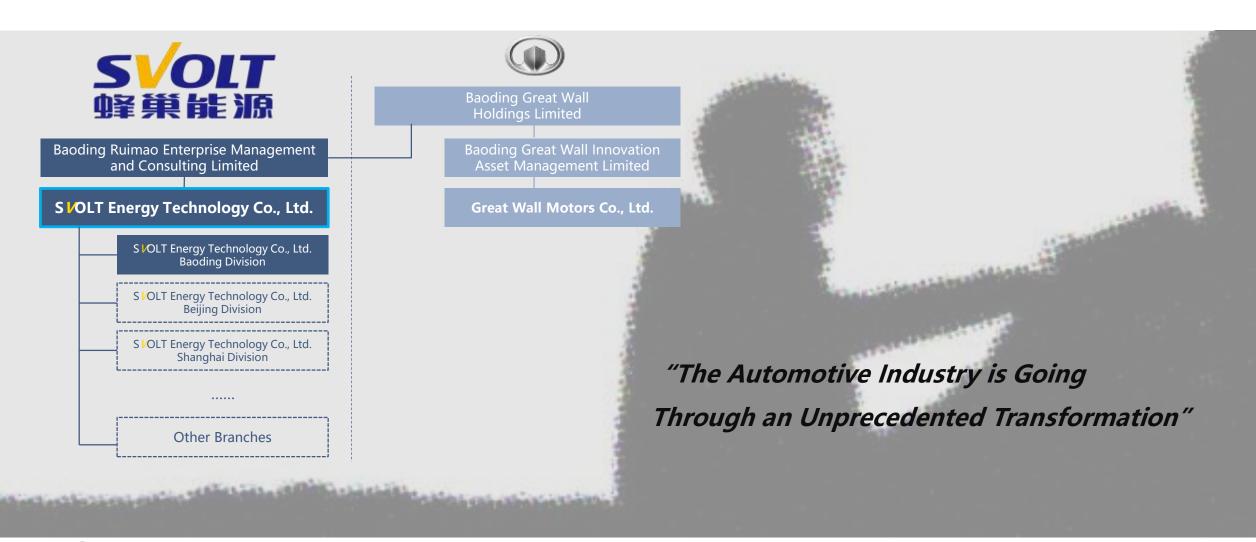
Introduction to S **OLT** Energy Technology

NAATBatt Annual Meeting & Conference March 11 – 14, 2019

Jeff Yambrick Vice President of International Sales & Marketing and Business Development

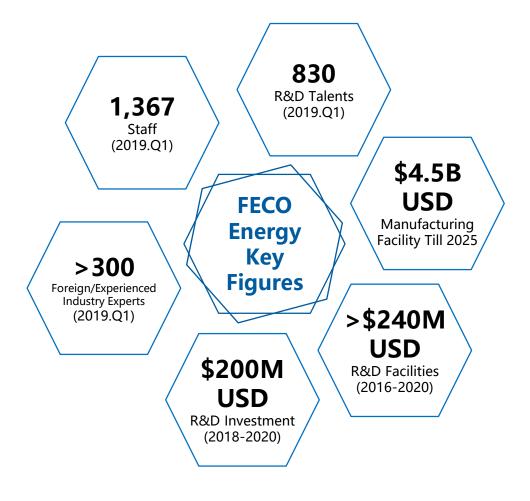


THE BIRTH OF S VOLT ENERGY TECHNOLOGY Our focus is the Battery Industry



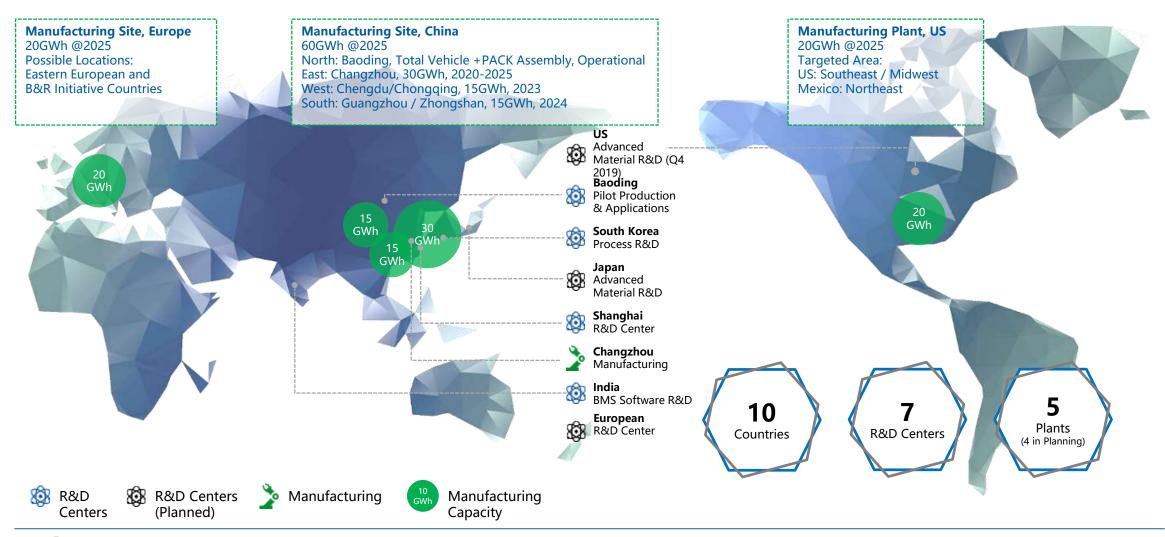
S VOLT ENERGY TECHNOLOGY Dedicated to be the Next Global Powerhouse for Premium LiB

SVOLT Energy Technology Company Limited is an energy company dedicated to series production of premium Lithium-lon batteries products from raw material, to cells, modules, BMS, packs, as well as ESS and Solar. SVOLT Energy is committed to promoting safe, efficient, clean, low-carbon footprint, and smart eco-system for mobility and the society's energy revolution. SVOLT Energy will start series production at its site in Changzhou, Jiangsu Province in 2020 with a planned cell capacity of 60GWh locally and additional 40GWh globally by 2025. Utilizing investments in the complete supply chain, SVOLT Energy is determined to be a global powerhouse for premium LIB that meets customer requirements in automotive, heavy duty, industrial, ESS, and other applications.





S **OLT ENERGY TECHNOLOGY**Global Presence and Planning



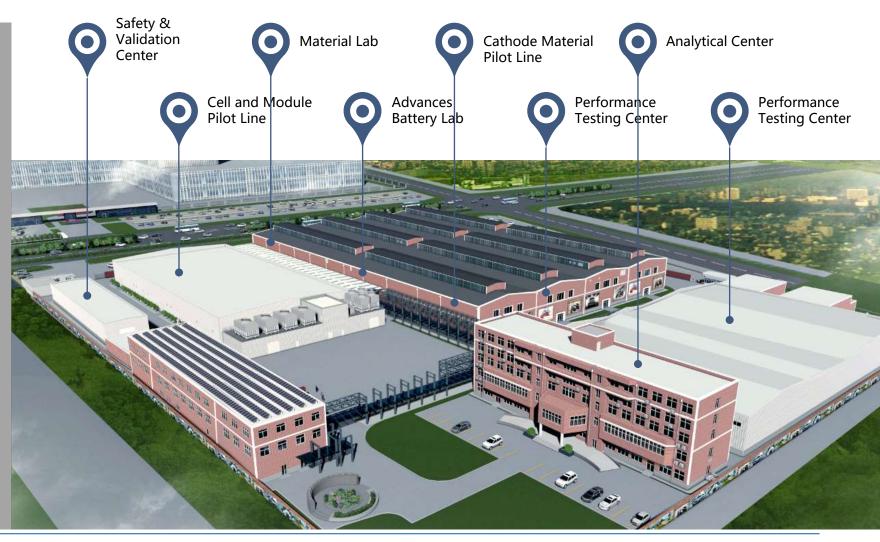


SVOLT R&D Facilities in Baoding

- Testing & Validation Centers:

 Conduct Tests Based on GB, IEC,
 SAE, ISO, USABC and Other Chinese and International Standards,
 including Global OEMs
- Performance Testing Center & HIL: Capable to Conduct Electrical Performance and Reliability Testing on Cell (6,960), Module (30), and Packs / Systems (17) as well as a HIL Lab
- Analytical Center: Analysis of Chemical / Physical / Mechanical Performance, Content, Properties, Structural and Mechanism.
- <u>Cell, Module & Pack Pilot Line:</u> 3 Pilot Production Lines with a capacity of 50MWh (Cells) and 30MWh (Modules / Packs)
- Material & Advanced Battery Labs:

 Focuses on Current, New and
 Alternative Materials, Solid State
 Technology, Lithium Sulfur and other advanced chemistries

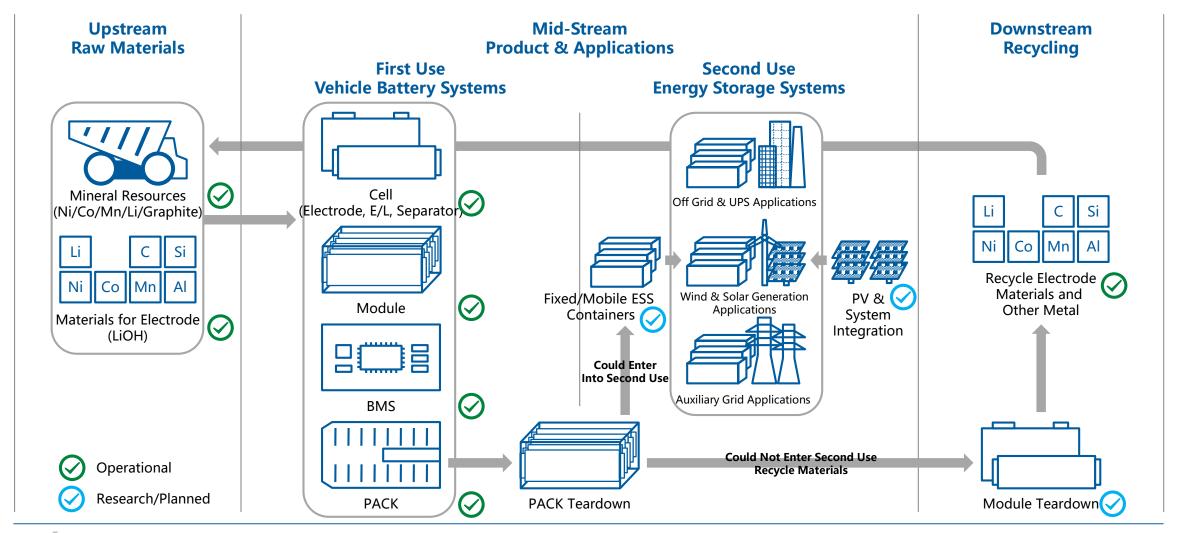




LEADING INTELLIGENT Manufacturing Plant



CREATING THE NEW ENERGY ECO-SYSTEM Complete Supply Chain Integration



MEET CUSTOMER REQUIREMENTS With Competitive Products

Safety First

High E/D

Fast Charge

Long Cycle Life

Wide Operating Range

















Long Range



Flexible

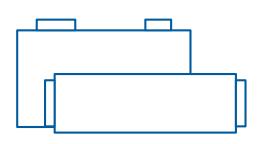


Perfect for Commercial Vehicles



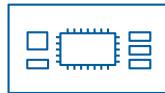
Driving in All Climates

PRODUCTS Chemistry, Cells, Modules, BMS & Complete Systems

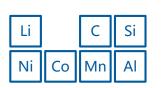


Prismatic & Pouch:

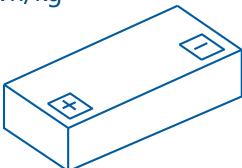
Current 811 based
Chemistry and looking to
the future / upwards of
265+Wh/kg



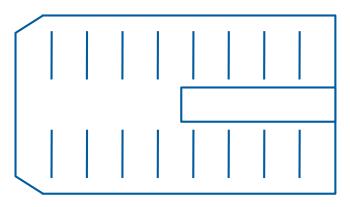
BMS: Industry Standard SOH & SOC Accuracy & designed in accordance with 262626



Advanced Chemistries & Materials: SiO / SiC / Li Metal / Li Rich / Solid State w the Target of 360+Wh/kg



Modules: Standard Industry Designs / 90% Assembly Efficiency



Prismatic & Pouch:
Structural Optimization /
Integrated with Vehicle
Body / 76% Efficiency

FULL INDUSTRY CHAIN Technical Solutions











Advanced Materials

- R&D Capabilities on Material Surface Characteristics and Cell Reactions Mechanism Analysis.
- In-House NCM 811 Cathode Reaches Global Leading Level.
- E/L Recipe Design and Additive Synthesis Capability
- Material Mechanics Simulation Capability



Cell Design

- Lithium Air, Lithium Sulfur, Solid State Batteries, and other new chemistries R&D
- Electrode Recipe, Electrode and Cell Mechanical Design
- Cell Simulation Model
- Cell Pilot Production



System Integration

- Structural Simulation Capability, Results Match 95% to Real-Life Testing
- Battery Thermal Model, PACK Internal Flow Field, Temperature Field Simulation Capabilities, Results Match 95% to Real-Life Testing



BMS Development

- Functional Safety, Systems, Hardware, and Software Design Capability
- Hardware Simulation Capability
- SOX High Accuracy Algorithm Development Capability
- Based on Autosar, Bottom Layer Software Development Capability
- Based on V Process, BMS Testing and Calibrations Capability



S VOLT BATTERY EXPERTS KNOW AUTOMOBILES Completed, Ongoing, and Planned

