

REPT
BATTERO

REPT BATTERO

COMPANY INTRODUCTION

2026 | REPT Energy,
Driving a Sustainable Future.

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GROUP INTRODUCTION

01

Refining Stainless Steel for a Century,
Building a Green Future

Tsingshan Holding Group - A Fortune Global 500 Company

TSINGSHAN INDUSTRY INTRODUCTION

REPT BATTERO

Main Business Areas



New Energy Battery Research and Manufacturing



Nickel and Lithium Mines R&D and Production



Stainless Steel Manufacturing and Trade

Ranked 11th

China's Top 500 Private Enterprises in the Manufacturing Industry

Ranked 247th

on the 2025 Fortune Global 500 List

Group Structure



永青科技集团
YONGQING TECHNOLOGY GROUP



永青集团
ETERNAL TSINGSHAN GROUP CO., LTD.



青拓集团
TSING TUO TSINGTUO GROUP



青山控股
TSINGSHAN



上海鼎信投资(集团)有限公司
SHANGHAI DECENT INVESTMENT (GROUP) CO., LTD.

Development History

1988年

Company founded

1992年

Entered the stainless steel industry

2003年

Formed Tsingshan Holding Group

2009年

Invested in mining operations in Indonesia

2018年

Became the world's largest nickel producer and fully integrated the upstream and downstream sectors of new energy lithium batteries

NEW ENERGY INDUSTRY CHAIN

Rapid Expansion of the Industry Chain

Tsingshan Group plans to expand across multiple segments of the lithium battery value chain through direct holdings or equity investments.

Resource Integration and Synergy

- Long-term stable supply
- Favorable business environment provided by market rules
- Integrated industry chain
- Backward integration of the industry chain to enhance bargaining power

China

- LFP and NCM
- Cells/Modules/Battery Packs

Indonesia

- Vertical integration from mining to cell production, including lithium, manganese, nickel, and cobalt
- Graphite
- Separator
- Lithium hydroxide



> 9 million tons of nickel metal reserves

25% global market share

Annual production of 880,000 tons of nickel metal products

Including 60,000 tons of battery-grade nickel sulfate



Annual production of 30,000 tons of battery-grade cobalt sulfate

Indonesia hydrometallurgical refining projects



Annual production of 20,000 tons of AG Artificial Graphite

Collaborate with Chinese graphite manufacturers and apply Indonesian coke materials

Partner



COMPANY INTRODUCTION

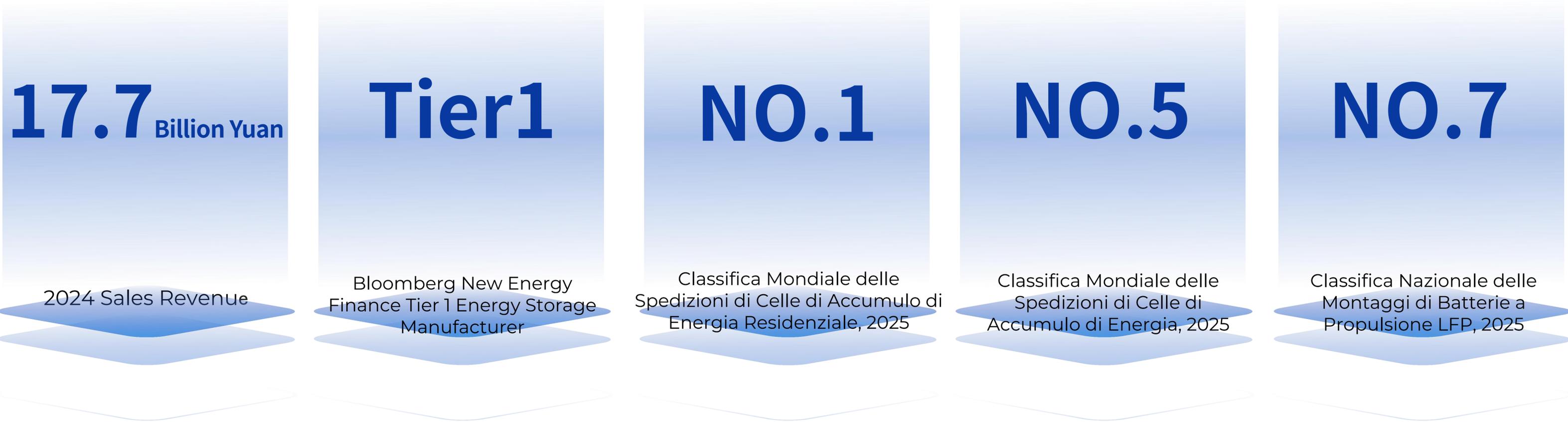
02

Leading the Future, Anchored in Safety

REPT BATTERO Energy Co., Ltd.

Experts in New Energy Power and Energy Storage Battery

REPT BATTERO Energy Co., Ltd., established in 2017, is the first enterprise in the new energy sector under Tsingshan Industry's strategic expansion. We are primarily engaged in the research, development, production, and sales of lithium-ion batteries, providing solutions for new energy vehicle power and smart energy storage, working alongside our customers to accelerate the global transition to green energy.



R&D CAPABILITY

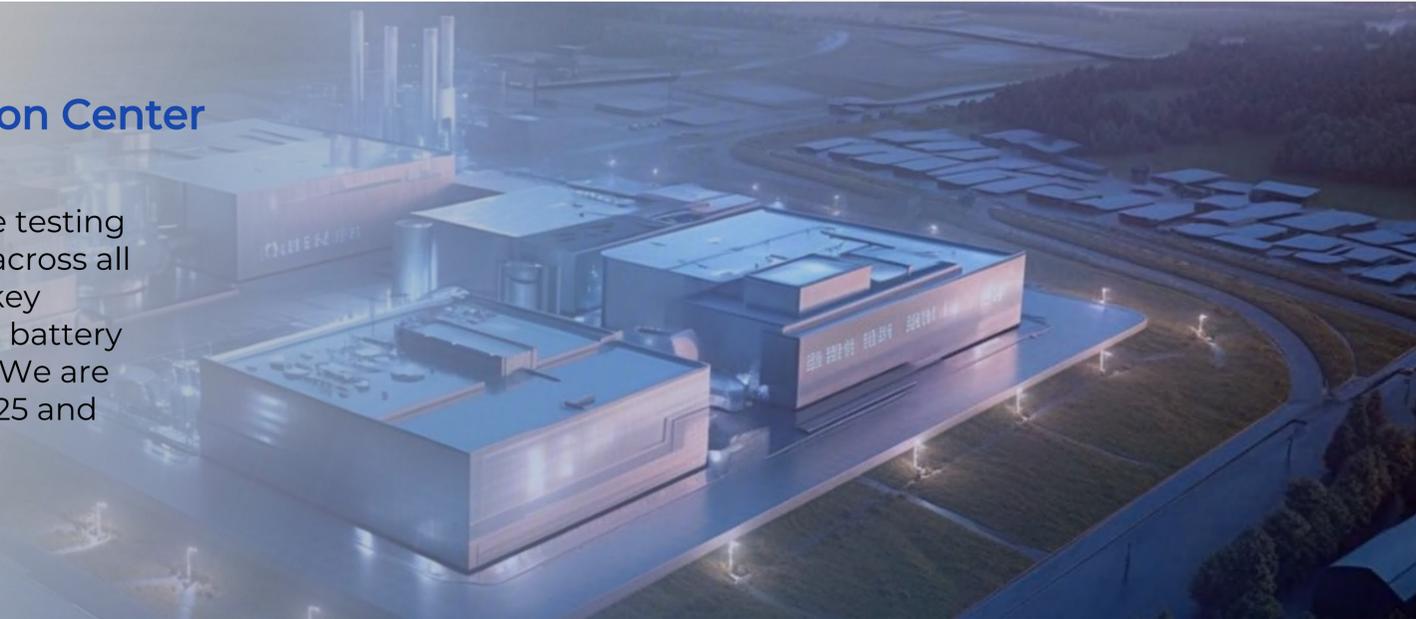
Through continuous innovation in materials, processes, structures, manufacturing techniques, and business models, we provide customers with unique and differentiated solutions, jointly advancing the industry and creating a better future.

03

We integrate standard development/product certification, functionality, performance, safety, and reliability testing and predictive analysis to offer customers the ultimate quality and safety solutions

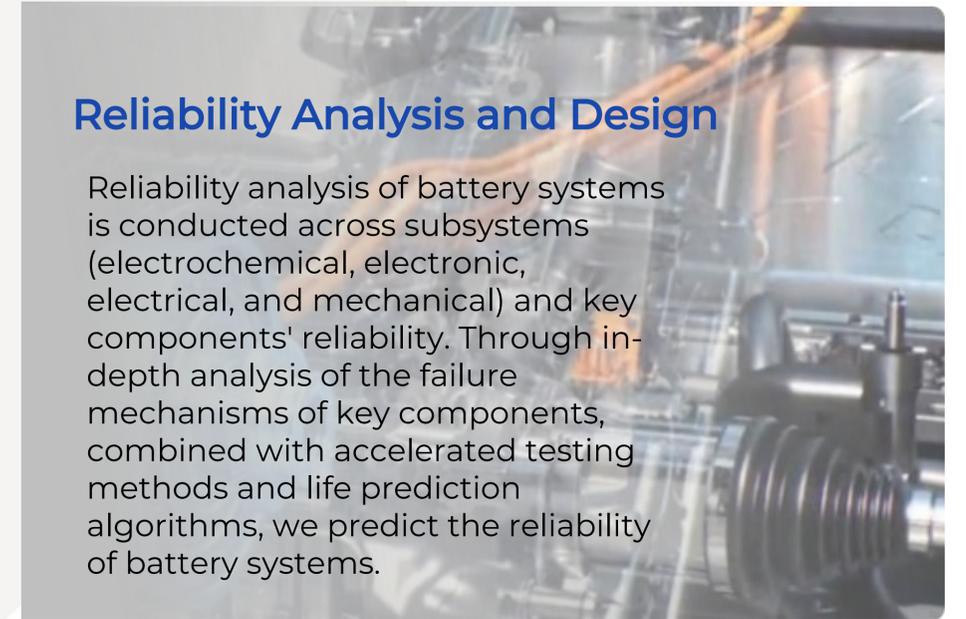
Testing and Validation Center

We possess comprehensive testing and validation capabilities across all levels, from raw materials, key components, modules, and battery packs, to end-use systems. We are certified with CNAS/ISO17025 and IATF16949 qualifications.



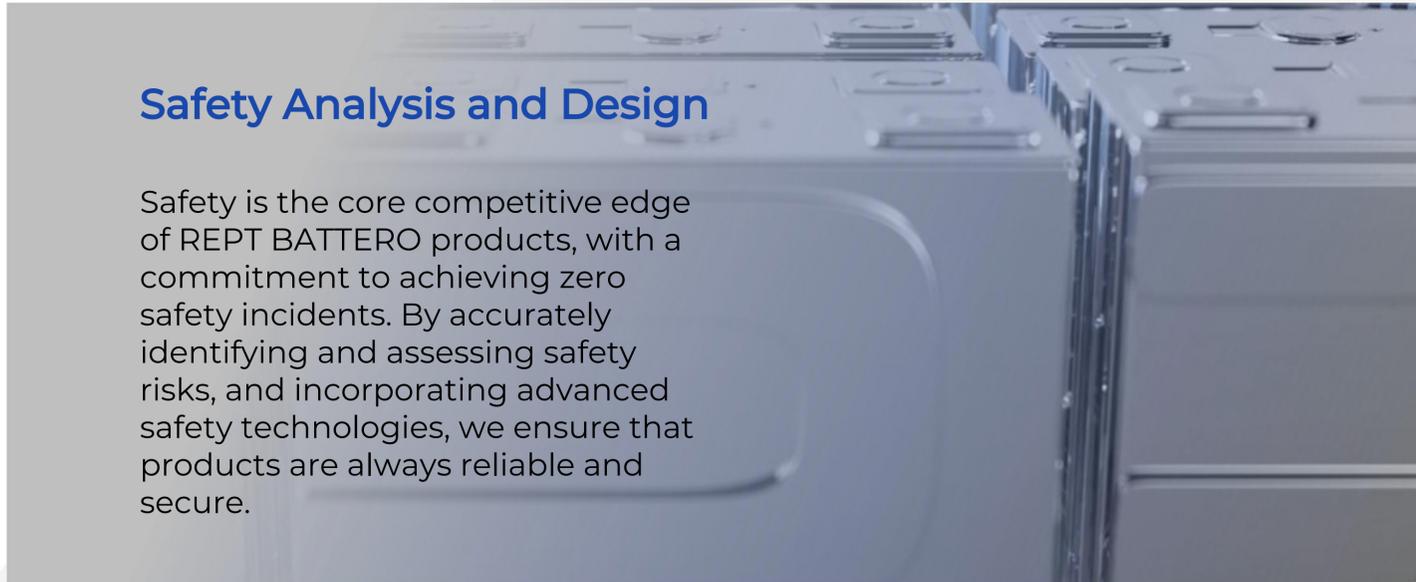
Reliability Analysis and Design

Reliability analysis of battery systems is conducted across subsystems (electrochemical, electronic, electrical, and mechanical) and key components' reliability. Through in-depth analysis of the failure mechanisms of key components, combined with accelerated testing methods and life prediction algorithms, we predict the reliability of battery systems.



Safety Analysis and Design

Safety is the core competitive edge of REPT BATTERO products, with a commitment to achieving zero safety incidents. By accurately identifying and assessing safety risks, and incorporating advanced safety technologies, we ensure that products are always reliable and secure.



Standards and Certifications

We ensure our product solutions comply with regional standards and certification requirements, while actively contributing to and leading the development of industry standards.

Over 100 overseas product certifications



Core Competence - Top-tier Technology Center

The hardware configuration and capabilities of our technology center fully meet standard requirements and address the needs of customers in sectors such as automotive and energy storage.

Continuous Investment in R&D	▶	3	300million+	30,000m ²	2,500+
		R&D Base	Equipment Investment	Building Area	Equipment Units
Standards and Patents	▶	4,050+	2,480+	950+	120+
		Global Patent Applications	Global Patents Granted	Invention Patent Applications	PCT Patent Applications
Advanced Laboratories	▶			200+	20,000+
		2021: Certified by China's National CNAS Laboratory Accreditation	2022: Obtained RheinTÜV Witness Laboratory Qualification Certificate	Test Projects	Test Channels



Innovation in Design and Intelligent Manufacturing

Extreme Chip Design

- Multi-dimensional Solid-Liquid Interface Design Technology

Enhanced the Activity of Dual High Electrode Foil

- Production management

Utilize the intelligent control system to adjust the equipment parameters according to the production data.

- Quality control and management

Intelligent manufacturing, quality control and management throughout the whole life cycle, and cross-departmental collaboration mechanism

Extreme Manufacturing

- Powerful Single-Line Manufacturing Capacity

> 10 GWh Annual Production Capacity

- Ultra-high-speed Automated Production Line

50PPM Square Aluminum Shell Production Line

- Lean Quality Control

> 6,000 Control Points & > 1,000 AI Monitoring

Digitalized Intelligent Factory

- Next-generation Zero-Carbon Factory

Smart Energy Management + Green Power Applications

- AI-driven

Digital Twin + Advanced Manufacturing Models

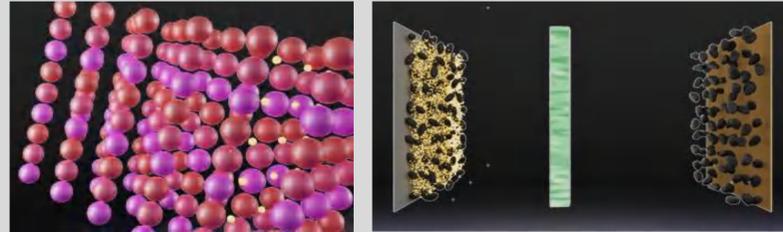
- 30 GWh Single Super Factory

30% Improvement in Space Utilization

Self-developed Core Technologies for Outstanding Performance

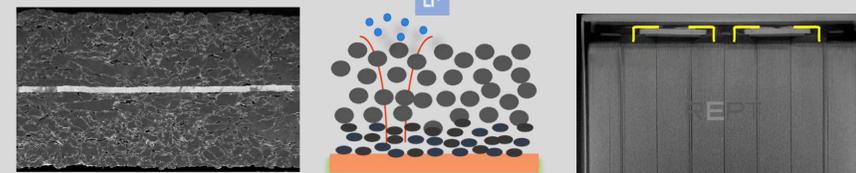
Chenxing Ultra-Fast Charging Battery Technology

Cathode Paves the Way, Speed Starts Here
Homogeneous Doping Lithium-Ion High-Speed Channel Cathode
Anode Regulates the Flow, Connectivity Reaches All
Isotropic Multi-Dimensional Channel Anode



Hybrid 4C Ultra-Fast Charging Battery Technology

Multi-Layer Coating Multi-Grade Pore Channel Electrode Design High Conductivity Ultra-Fast Transport Design High Conductivity High Volumetric Utilization Rate



Independently developed CSU (Sampling) module

- Intelligent fast charging strategy
- Cell monitoring and detection
- Optimization of cycle life
- Residual value assessment
- Wireless communication & Cloud Intelligent Management BMS

Meet multiple scenarios

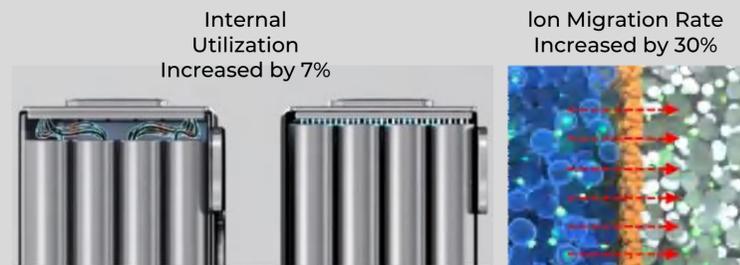
- Passenger vehicles & commercial vehicles & energy storage

Meet the national standards

- It has passed the detection of GBT28046 environmental and electrical standards, and wireless communication is realized inside the battery pack.

Wending Battery Technology

Featuring a Wending cover design and a fully integrated fixed Wending structure, this design enables an integrated connection of the internal cell structure, effectively improving space utilization by over 7%



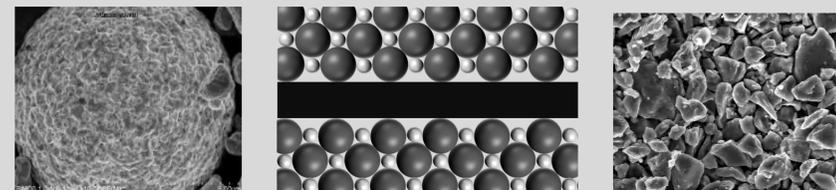
Traditional Structure

Wending Structure

Dual High Solid-Liquid Interface Technology

Novel Solid-Liquid Hybrid Battery Technology

High-Nickel Cathode Solid-State Coating Cathode Main Material Fast Ion Transport Low Swelling Silicon-Carbon Anode



Advanced liquid thermal management technology

Bid farewell to traditional electric heating. Achieve an integrated design of liquid heating and liquid cooling, and control the temperature difference of a single cluster within 5 °C, creating a friendly and consistent environment.



Venturi Safety System

Venturi Oxygen-Blocking Channel, Graded Microporous Filter Screen Relief, and Intelligent BMS Early Warning





46

Processes' data traceability from raw material intake to delivery



3,000+

MES process control points monitored in real-time



97

Key and critical characteristic controls

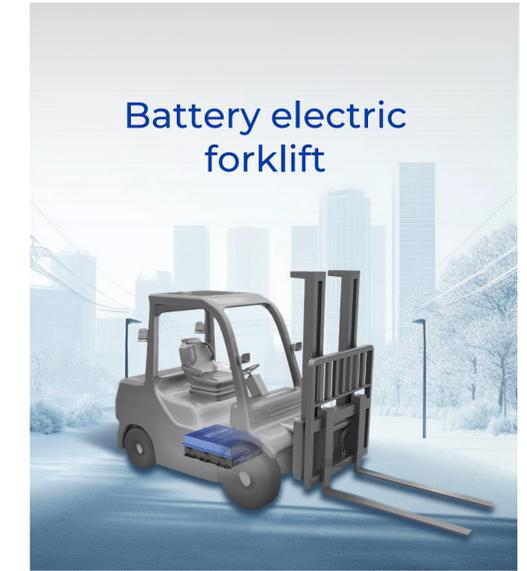


600+

Process control points in compliance with IATF16949 quality management system

APPLICATION FIELD

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More customization
Application scenarios

ENERGY STORAGE SOLUTION

Comprehensive solutions driving the transformation and upgrading of energy structures.



Application Types	Application Purpose
Peak Shaving and Frequency Regulation	Assisting the grid in peak shaving and frequency regulation, stabilizing the power network
Spinning Reserve	Reducing standby unit activation time and minimizing waste
Black Start	Providing startup power for power plants
Renewable Energy Curtailment Utilization	Addressing the issue of wasted wind and solar energy
Coordinated Utilization of New Energy	Smooth output of new energy, enhancing penetration and tracking of planned curves
Energy Storage Stations	Peak shaving and frequency regulation, providing emergency power support
Backup Capacity	Addressing grid peak power demands
Distributed Micro-grids	Mitigating fluctuations in renewable energy sources
Time-of-use Electricity Price Management	Profiting from peak and off-peak pricing differences
Capacity Fee Management	Enhancing user self-balancing and reducing capacity costs
Energy Storage Charging Stations	Used for electric vehicle charging, resolving configuration capacity issues
Emergency Power Micro-grids	Enhancing the reliability and security of power supply

R&D CAPABILITY

Powtrix 1.0

Y52 liquid cooled energy storage system

Energy Storage Modul		Energy Storage System
Group form	1P52S	10P416S
Nominal voltage	166.4V	1331.2V
Voltage range	130V~189.8V	1081.6~1497.6V
Nominal energy	46.592KW	3727.36kWh
Dimensions	1120*810*238	20HQ
Weight	~330kg	35t



Liquid-Cooled Outdoor Cabinet

Group form	1p416s
Nominal voltage	1331.2V
Voltage range	1164.8~1497.6V
Nominal energy	417.99kWh
Dimensions	1.40m*1.34m*2.36m
Weight	3.7t

Powtrix 2.0

Y104 liquid cooled energy storage system

Energy Storage Modul		Energy storage System
Group form		12P416S
Nominal voltage		1331.2V
Voltage range		1040V~1500V
Nominal energy		5015.9kWh
Dimensions		20HQ
Weight		45T



Y52 liquid cooled energy storage module



Y104 liquid cooled energy storage module



Liquid cooled integrated machine

Liquid cooled integrated machine	
Nominal energy	233kWh
Ambient humidity	5%~95%RH
Nominal power	125kW
Dimensions	1250mm×1350mm×2250mm
Weight	<2600kg

APPLICATION SCENARIO



Wenzhou, Zhejiang
Shuangyu project peak shaving and valley filling 14mWh



Jingneng Guangxi Baise
Shared energy storage power station project 200MWh



Guazhou, Gansu
12MWh Photovoltaic Energy Storage Project



Beijing Energy Inner Mongolia Tongliao
Shared energy storage power station project 476MWh source grid side energy storage



Ningxia Huarun Haiyuan
200MWh/400MWh



Yongchuan Songgai Project 400 MWh
Chongqing Independent Energy Storage



Chongqing Three Gorges Yongchuan
200MWh/400MWh



Morowali, Indonesia
Power grid frequency modulation IMIP project phases I-IV 50MWh



Weda Bay, Indonesia
Power grid frequency regulation IWIP project phase II and III 28MWh



Shache "project 800 MWh
Xinjiang Photovoltaic Distribution and Storage



PG&E Project
12 MWh Long Term Energy Storage in California, USA



St Gal Energy Storage Project
226MWh FM energy storage in Texas, USA



Weda Bay, Indonesia
Power grid frequency regulation IWIP project phase I 30MWh



Bulgaria 7.45MWh photovoltaic distribution and storage



The 'MY BESS' project
Malaysia sample 3.7 MWh



North American FLEXGEN Shared Energy Storage Project
Grid side energy storage 245MWh



The Waratah Super Battery project
1950 MWh FM energy storage in New South Wales, Australia



Belgium project
126MWh energy storage project



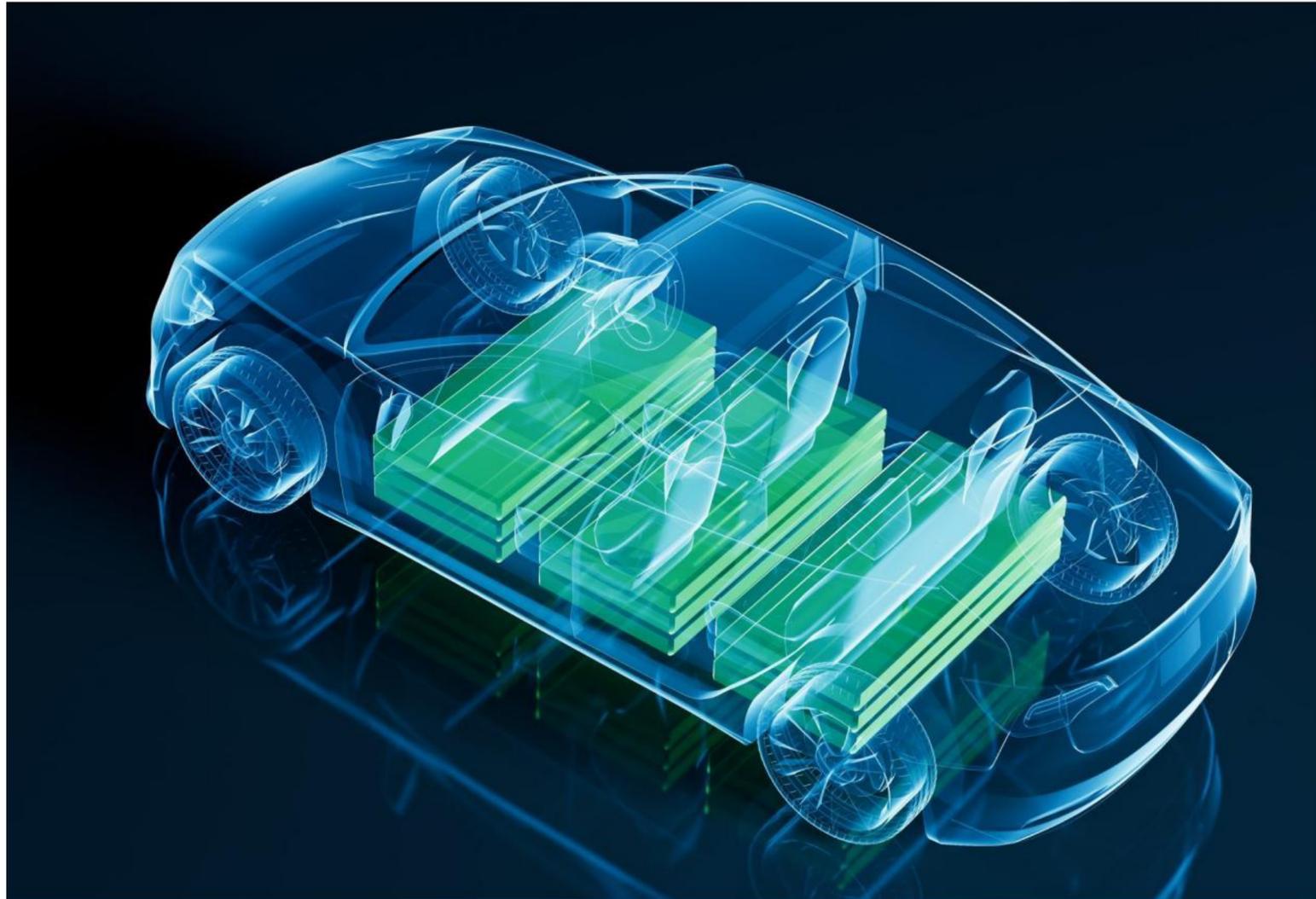
North American FLEXGEN Shared Energy Storage Project
EV Charge Optical Storage Charging Project



Cascade Energy Storage Project 117.5MWh
California, USA

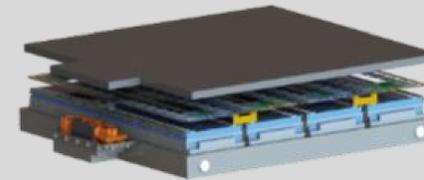
PASSENGER VEHICLE BATTERY PRODUCTS

The hardware configuration and capabilities of our technology center fully meet standard requirements and address the needs of customers in sectors such as automotive and energy storage.



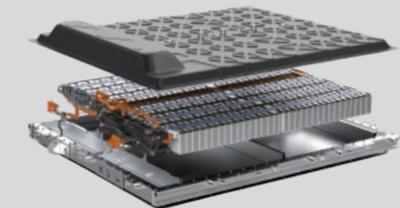
GREEN CTP PACK

Both the battery cells and the complete battery packs can be recycled for secondary use.



4C Fast-Charging CTP

Average 4C, Peak 6C Fast Charging



PHEV Battery system

Save fuel and have excellent low-temperature performance.



BEV Battery system

super fast charging



PASSENGER VEHICLE POWER BATTERY SOLUTIONS

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BESTUNE YUEY 07 (2025)



MG4 ELECTRIC (2025)



SAIC ROEWE D5X (2024)



Volvo EX30 (2024)



SAIC ROEWE D7-DMH (2023)



smart 1# (2023)



SAIC ROEWE D6 (2023)



SGMW YUNDU (2023)



FAW NAT (2023)



SGMW XINGGUANG (2023)



Stellantis AMI (2022)



FAW E131 (2023)



SGMW BINGO (2023)



NISSAN D60 (2022)



SGMW MINI (2021)

COMMERCIAL VEHICLE BATTERY PRODUCTS

The hardware configuration and capabilities of our technology center fully meet standard requirements and address the needs of customers in sectors such as automotive and energy storage.



Commercial vehicle battery system

Standard C-type box



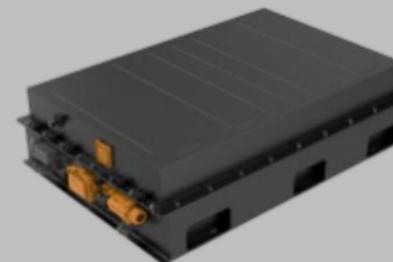
Commercial vehicle battery system

Standard D-type box



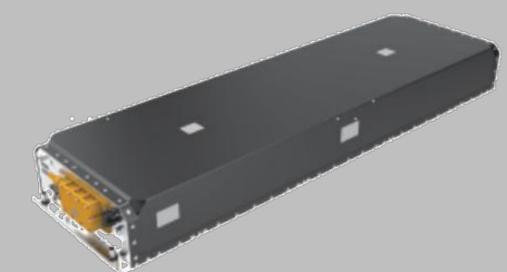
Commercial vehicle battery system

Standard G-type box



Commercial vehicle battery system

Standard F-type box



COMMERCIAL PASSENGER VEHICLE POWER BATTERY SOLUTIONS

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FAW Jiefang

Application Models: Battery-swappable pure electric semi-trailer tractor
Supporting Battery Cells: 230 Ah



SANY zhonggong

Application Models: Sany iSEE2 Electric Dump Truck
Supporting Battery Cells: 230 Ah



Shanxi Heavy Duty Automobile

Application Models: Battery-swappable pure electric tractor
Supporting Battery Cells: 230 Ah



JAC Motors

Application Models: Battery-swappable pure electric flatbed transport truck
Supporting Battery Cells: 230 Ah/324 Ah

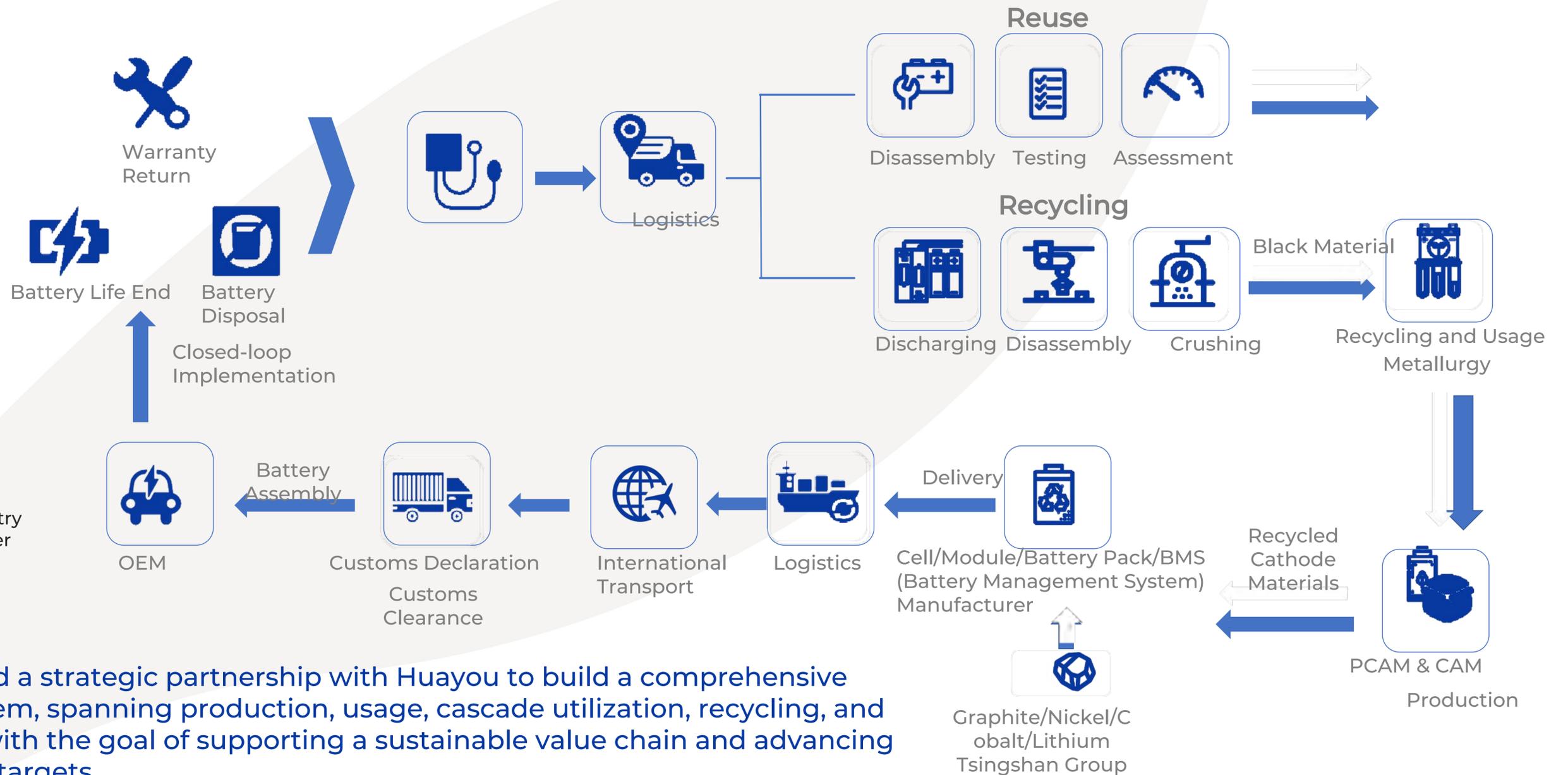
ENVIRONMENTAL RECYCLING SOLUTIONS

Rapid Expansion of the Industry Chain

Tsingshan Group plans to expand across multiple segments of the lithium battery value chain through direct holdings or equity investments.

Resource Integration and Synergy

- Long-term stable supply
- Integrated industry chain
- Favorable business environment provided by market rules
- Backward integration of the industry chain to enhance bargaining power



The company has formed a strategic partnership with Huayou to build a comprehensive battery industry ecosystem, spanning production, usage, cascade utilization, recycling, and resource regeneration, with the goal of supporting a sustainable value chain and advancing global carbon neutrality targets.

DEVELOPMENT STRATEGY

04

Driven by Innovation, and building a first-class new energy company

CAPACITY PLANNING

Planned Production Capacity for 2026

120GWh+

Expected to Reach

Trillion-level Scale by 2027

R & D Center:

North America | Europe | China

Manufacturing Bases:

Wenzhou | Jiashan | Liuzhou | Foshan | Chongqing | Southeast Asia



Wenzhou Manufacturing Base

As the first-launch base for the Group's new energy business, it undertakes the functions of early-stage production capacity carrying and industrial chain collaboration.



Jiashan Manufacturing Base

A strategic R&D and manufacturing pivot in the Yangtze River Delta, empowering technology iteration and capacity implementation.



Liuzhou Manufacturing Base

Jointly established with SAIC Motor, it focuses on power battery cells/modules and builds a regional new energy industrial ecosystem.



Foshan Manufacturing Base

The core production base in South China focuses on high-end power/energy storage batteries and strengthens the local supply chain.



Chongqing Manufacturing Base

The core industrial hub in Central and Western China focuses on battery cell and PACK production lines, empowering the new energy industrial cluster in Southwest China.



Planned Manufacturing Base

The first overseas green factory leverages local resources to serve the Southeast Asian and global markets.



Professional Training/Skill Guidance

Provide Expert Training



Remote Monitoring/Maintenance

Online Technical Support Available Anytime



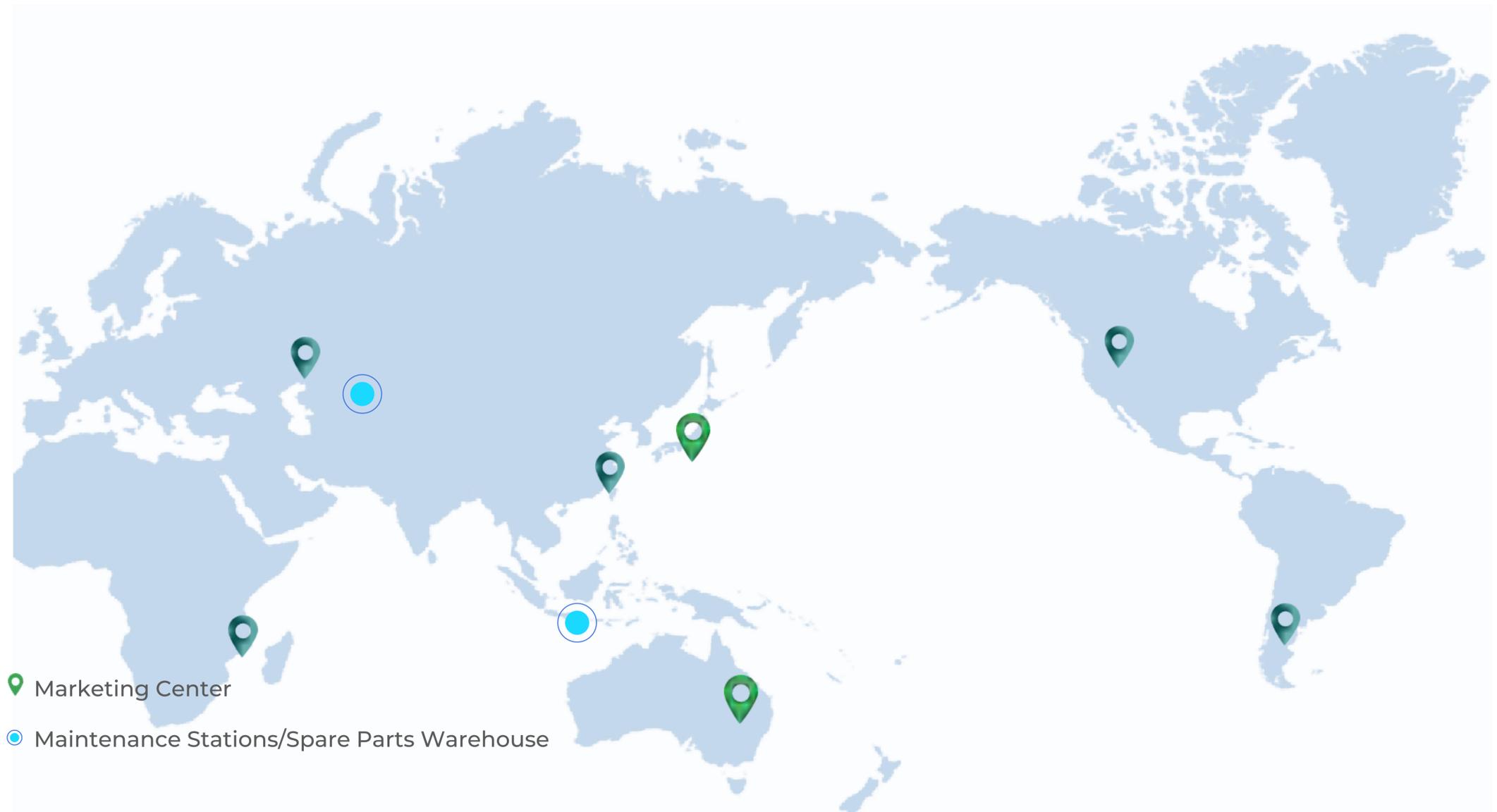
Fast Response/Regular Maintenance

24/7 After-Sales Service Guarantee System



Maintenance Stations/Spare Parts Warehouse Guarantee

Provide Optimal Safety Operation Guarantee



Asia	Europe	North America	South America	Africa	Australia
China Japan	Germany	USA	South America	Africa	Australia

EV Partners



Passenger Vehicle Power Battery Solutions



Commercial Passenger Vehicle Power Battery Solutions



ESS Partners



Household Energy Storage Users



Large-Scale Energy Storage Users



EXPLORE DIVERSIFIED COOPERATION MODELS TO LEAD THE DEVELOPMENT OF NEW ENERGY INDUSTRY



Collaborative Development of Raw Materials

Globally, we are jointly developing upstream resources for new energy, including nickel, cobalt, lithium, and manganese, to support the industry



In-depth Supply Chain Cooperation

With European Union OEMs, we provide a stable supply of raw materials and cost control advantages



Global Battery Recycling

We have established a strategic cooperation with Huayou Recycling for the global recycling of lithium batteries, promoting sustainable development

In recent years, REPT BATTERO has made significant strides in the new energy sector, continuously innovating in technological research and development. We have also actively pursued diversified collaboration models, securing key partnerships with renowned automotive manufacturers such as RENAULT, Stellantis, and domestic automotive giant SAIC. These collaborations will inject new momentum into the high-quality development of the new energy industry and open up vast prospects for the future growth of REPT BATTERO.

HIGH ESG STANDARDS DRIVE SUSTAINABLE DEVELOPMENT

Sustainable Management Strategy

-  Supply Chain Traceability Management 01
-  Energy Utilization 02
-  Battery Recycling 03
-  Waste Emissions and Utilization 04
-  Employee Production Safety and Health 05
-  Corporate Social Responsibility System 06



ESG

ESG Achievements

- 1、 United Nations Global Compact ("UNGC") "SDG Ambition Accelerator" Participating Enterprise Certification
- 2、 Responsible Business Alliance (RBA) Silver Level Certification
- 3、 GB/T 39604-2020 Corporate Social Responsibility Management System Certification
- 4、 Wind ESG Electrical Equipment Industry Grade A Rating
- 5、 2024 Greenlight ESG List Exemplary Case – Exemplary Innovation Contribution List TOP10
- 6、 The "2024 Annual Innovation Award - Energy Conservation and Emission Reduction Technology Progress Award" and the "Carbon Neutrality Field Technology Progress Award" issued by the China Energy Conservation Association and the China Quality Certification Center.
- 7、 "Five-in-One" Green Low-Carbon Integrated Energy Demonstration Station Project

-  Liuzhou Base was awarded Guangxi Zhuang Autonomous Region Green Factory 
-  Liuzhou Base was awarded Guangxi Intelligent Demonstration Manufacturing Enterprise 
-  Jiashan Base Jiaxing City Green was awarded Factory 
-  Wenzhou Base and Liuzhou Base were awarded National-level Green Factory 

We will establish a development system aligned with the United Nations Sustainable Development Goals, creating a safe and healthy workplace for all employees and a green, eco-friendly community environment to ensure sustainable and rapid growth.

**REPT
BATTERO**

REPT Energy, Driving a Sustainable Future.