昆宇电源股份有限公司
Cospowers Technology Co., Ltd.
山东省东营市东七路28号203室
Room 203, No.28, Dongqi Road, Dongying City, Shandong Province, PRC

北京昆宇新能源有限公司
Beijing Cospowers New Energy Co., Ltd.
北京市丰台区纪家庙路169号院
No.169 Jijiamiao Road, Fengtai District,Beijing City, PRC

哈尔滨昆宇新能源有限公司
Harbin Coslight New Energy Co., Ltd.
哈尔滨高新技术产业开发区迎宾路集中区南湖街1栋202室
Building 1, Nanhu Road, Jizhong Area, Yingbin Road, Development Zone, Harbin City, PRC

香港昆宇电源科技有限公司
Hongkong Cospower Technology Co., Ltd.
香港九龙尖沙咀东连威老道94号明辉中心804室
Unit 804, 8/F, Inter-Continental Plaza, 94 Granville Road, Tsim Sha Tsui East, Kowloon, Hong Kong

深圳昆宇电源科技有限公司
Shenzhen Coslight Power Technology Co., Ltd.
深圳市宝安区燕罗街道罗田社区广田路2号厂房101
Factory 101,No.2,Guangtian Road,Luotian Community, Yanluo Street, Baoan District, Shenzhen City, Guangdong Province, PRC

深圳市力可兴电池有限公司
Lexel Battery (Shenzhen) Co., Ltd.
深圳市宝安区燕罗街道罗田社区第三工业区广田路2号
No.2 Guangtian Road, No.3 Industrial Zone, Luotian Community, YanluoStreet, Baoan District, Shenzhen, PRC

常德昆宇新能源科技有限公司
Changde Cospowers New Energy Technology Co., Ltd.
湖南省常德经济技术开发区樟木桥街道苏家渡社区松林路4号（石墨烯产业园）
(Graphene IndustrialPark)No.4 Songlin Road,Sujiadu community,Zhangmuqiao Street,Economic and Technological Development Zone, Changde City, Hunan Province, PRC

昆宇电源股份有限公司长沙分公司
Cospowers Technology Co., Ltd. Changsha Branch
湖南省长沙市高新开发区尖山路39号中电软件园一期21栋3楼
3rd Floor, Building 21, Phase I, Zhongdian Software Park, No.39 Jianshan Road, High-Tech Development Zone, Changsha City, Hunan Province, PRC

广东昆宇新能源有限公司
Guangdong Cospowers New Energy Co., LTD
韶关市武江区甘棠大道23号2号厂房、综合楼403、501室
Room 403 and 501, Foctory 2, No.23, Gantang Avenue, Wujiang District, Shaoguan City, Guangdong Province, PRC

安徽昆宇新能源有限公司
Anhui Cospowers New Energy Technology Co., Ltd.
安徽省天长市天康大道以南、经十九路两侧
On both sides of Jing 19 Road,South of Tiankang Avenue, Tianchang City, Anhui Province, PRC

常德昆宇新材料有限公司
Changde Cospowers New Energy Co.,Ltd.
湖南省常德经济技术开发区樟木桥街道苏家渡社区松林路4号（石墨烯产业园综合楼栋3楼301室）
(Room 301,3rd Floor,Comprehensive Building,Graphene Industrial Park)No.4 Songlin Road,Sujiadu community,Zhangmuqiao Street,Economic and Technological Development Zone, Changde City, Hunan Province,PRC

美国昆宇
Cospowers America Inc.
美国内华达州拉斯维加斯南谷景大道3859号2室
3859 S. Valley View Blvd. Suite 2, Las Vegas.NV 89103.USA

荷兰昆宇
Cospowers B.V.
Prins Hendrikkade 21 E,1012TL阿姆斯特丹，荷兰
Prins Hendrikkade 21 E, 1012TL Amsterdam, Netherland

德国昆宇
Cospowers GmbH
陶夫斯坦街1号，63477 迈恩塔尔，德国
Taufsteinstr. 1, 63477 Maintal, Germany

韩国昆宇
Cospower Company Limited（South Korea）
韩国京畿道骊州市加南邑加南路909-15
909-15, Ganam-ro, Ganam-eup, Yeoju-si, Gyeonggi-do, Republic of Korea

澳大利亚昆宇
Cospowers Technology Australia Pty Ltd
维多利亚州伯伍德伯伍德公路301号3125
301 Burwood Hwy Burwood Vic 3125

智利昆宇
Cospowers Chile SPA
智利圣地亚哥大都市区拉斯孔德斯
Las Condes, Región Metropolitana De Santiago, Chile

印度昆宇
Cospower Technology Indian Branch Office
25-B硬件园，伊玛拉特坎查，拉维拉尔，马赫斯瓦拉姆(M)，兰加雷迪，特伦甘纳邦-500005
Plot No.:25-B Hardware Park,Imaratkancha,Raviral,Maheswaram(M),Ranga Reddy,TeLANGANA-500005

KY-202610

昆宇电源
COSPOWERS

智慧锂电系统
整体解决方案提供商

SMART LITHIUM BATTERY TOTAL SOLUTION PROVIDER

昆宇电源股份有限公司
Cospowers Technology Co., Ltd.

关于昆宇 About Cospowers

昆宇电源股份有限公司(简称昆宇电源)是一家专注于新能源储能领域的国家高新技术企业。技术团队深耕储能电池领域30余年，具备从材料、电芯、电池管理系统、能量管理系统、系统集成等研发、制造、销售、服务能力，已为全球70多个国家和地区提供电力储能、工商业储能、数据中心储能、通信储能、户用储能、钠电储能、消费类电池等领域多元化的产品及系统化解决方案。

Cospowers Technology Co., Ltd.is a high-tech enterprise specializing in the field of new energy storage. With a technical team boasting over 30 years of deep expertise in the energy storage battery industry, the company possesses comprehensive capabilities in R&D, manufacturing, sales, and service across materials, cells, battery management systems, energy management systems, and system integration. It has provided diversified products and systematic solutions for more than 70 countries and regions worldwide in sectors such as utility-scale energy storage, commercial and industrial energy storage, data center energy storage, telecommunications energy storage, residential energy storage, sodium-ion battery energy storage, and consumer batteries.

23GWh+

累计全球出货量

Global Cumulative Shipments

Tier1

彭博全球一级储能厂商

BloombergNEF Energy Storage Manufacturer

860K ㎡

工厂面积

Factory Area

530+

专利技术及软著

Patents and Software Copyrights

30+

参与标准制定

Participation in Standard Formulation

企业文化 Enterprise Culture

企业愿景
OUR VISION

成为受尊重的智慧锂电系统整体解决方案提供商
Become a respected intelligent lithium energy overall solution provider

企业使命
OUR MISSION

助力绿水青山，共享清洁能源
Promote ecological conservation share clean energy

核心价值观
CORE VALUE

TEAM

Trustworthiness 诚信

Effective collaboration 协同

Adventurous spirit 进取

Moderately inclusive environment 包容

发展历程 Development History

昆宇电源深刻理解电力和储能系统，记录着锂电储能的发展变迁，引领着行业发展。

Cospowers has a deep understanding of power and energy storage systems, records the development and changes of lithium energy storage, and leads the development of the industry.

2000

中国第一批锂离子电池研发制造企业；

China's first batch of lithium-ion battery R&D and manufacturing enterprises.

2007

中国第一批研发制造动力锂离子电池企业；

China’s first group of enterprises of R&D and manufacturing power lithium-ion battery.

2012

国际通信基站锂离子储能市场占有率第一；

No.1 market share in the lithium ion energy storage of international communication base station.

2013

深圳昆宇电源成立；

Shenzhen Coslight was established.

2019

昆宇电源成立，哈尔滨、常德子公司相继成立；

Cospower was established. Subsidiaries of Harbin, Changde were established.

2020

东营工厂3GWh投产；

Dongying factory of 3GWh was put into operation.

2021

发布”简”系列储能专用电芯；
常德工厂1.5GWh投产；
获取联合国供应链光储业务；
储能系统首次出海；
发布智慧锂电储能产品；

"Simple" series energy storage cell was released;
Changde plant of 1.5GWh was put into operation;
The United Nations supply chain light storage business was obtained, and the energy storage system went to sea for the first time;
Smart lithium battery energy storage products was released;

2022

北京、安徽、印度、韩国昆宇相继成立；
单项100MWh+储能系统成功并网；
长沙技术研究院成立；
发布高能量液冷储能系统产品，并实现80MWh系统应用；

Cospowers of Beijing, Anhui, India,South Korea have been established successively;
A single 100MWh+ energy storage system successfully connected to the grid;
Changsha Technology Institute was established;
The high energy liquid cooled energy storage system products was released, and the 80MWh system applications was realized;

2023

中标720MWh储能系统订单；
广州、荷兰昆宇相继成立；

The 720MWh energy storage system order bidding was won;
Cospowers of Guangdong, Netherlands were established successively;

2024

昆宇电源股份有限公司成立;
常德1.5GWh钠电产线动工;
安徽工厂3GWh投产;

Cospowers Technology Co., Ltd was established;
Changde 1.5GWh sodium battery production line started;
Anhui plant of 1.5GWh was put into operation;

2025

彭博新能源全球Tier 1一级储能厂商；
常德1.5GWh钠电产线正式量产;

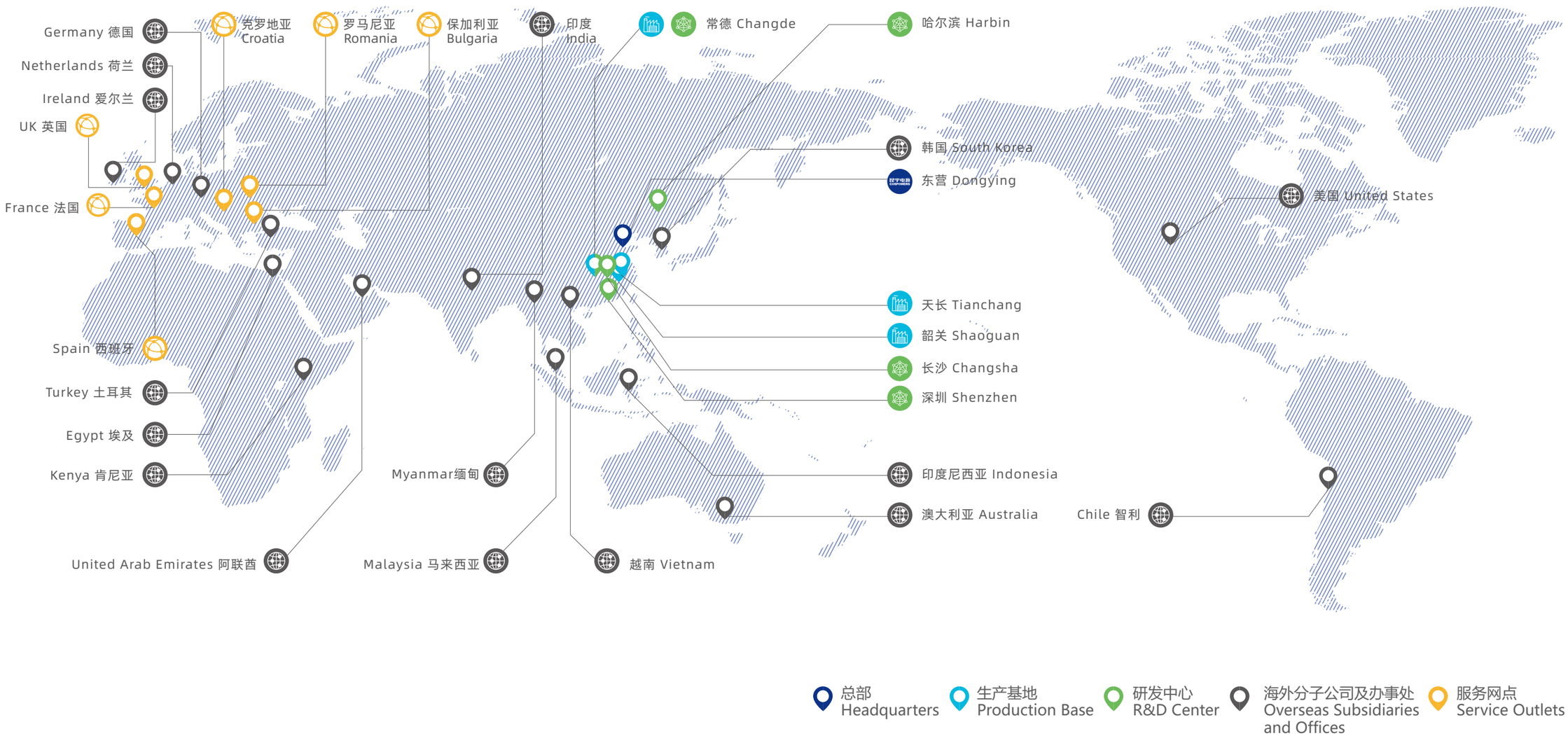
BloombergNEF 2025 Global Tier 1 Energy Storage Manufacturer;
The 1.5GWh sodium-ion battery production line in Changde officially entered mass production.

全球化布局 Global Layout

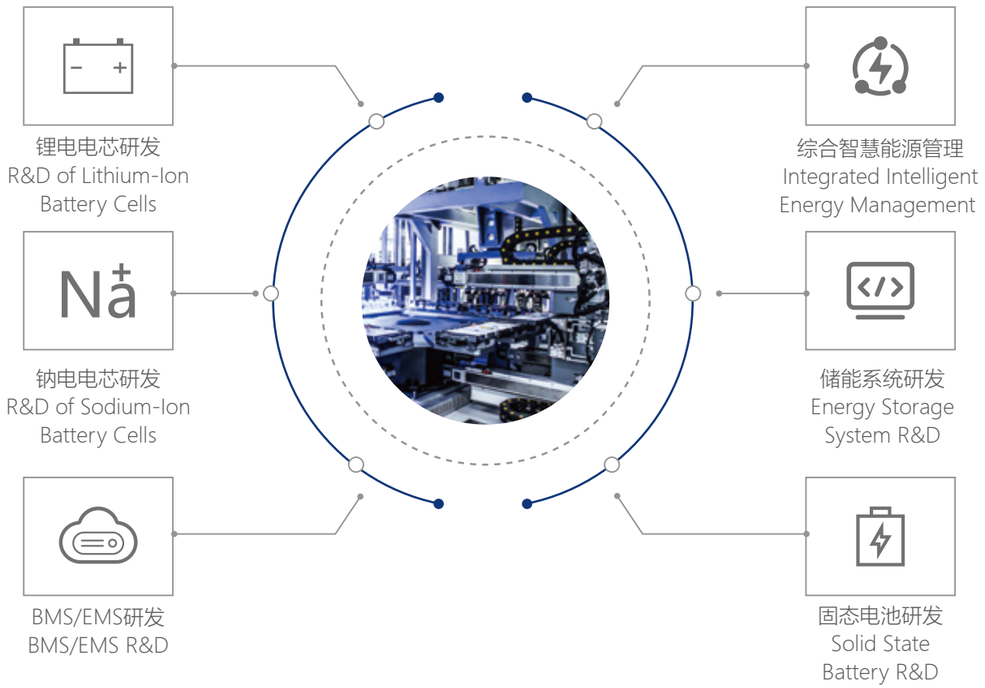
昆宇电源作为中国储能领域出海先行者，率先趟出了全球化发展之路。

As a pioneer among Chinese energy storage companies in going global, Cospowers Supply has been the first to blaze a trail for international development.

70+	29	3	4
业务覆盖 Service Coverage	国内外分子公司及服务网点 Domestic and overseas subsidiaries and service outlets	生产基地 Production Base	研发中心 R&D Centers



研发布局 R&D Layout



研发平台 R&D platforms

电芯研发中心	Cell research and development center
网络能源研发平台	Network Energy Research and Development Center
电子研发中心	Electronic research and development center
电力研发中心	Power research and development center

研发资源 R&D resources

研发人员：**350+**	R&D personnel：**350+**
研发专利：**530+**	R&D patents：**530+**
研发投入：**5%+**	R&D input：**5%+**
行业标准制定：**30+**	Industry standard setting：**30+**
实验室总面积：**10000+㎡**	Total laboratory area：**10000+㎡**
1个省级企业技术中心	**1** Provincial enterprise technology center
1个国家级博士后科研工作站	**1** National postdoctoral research station

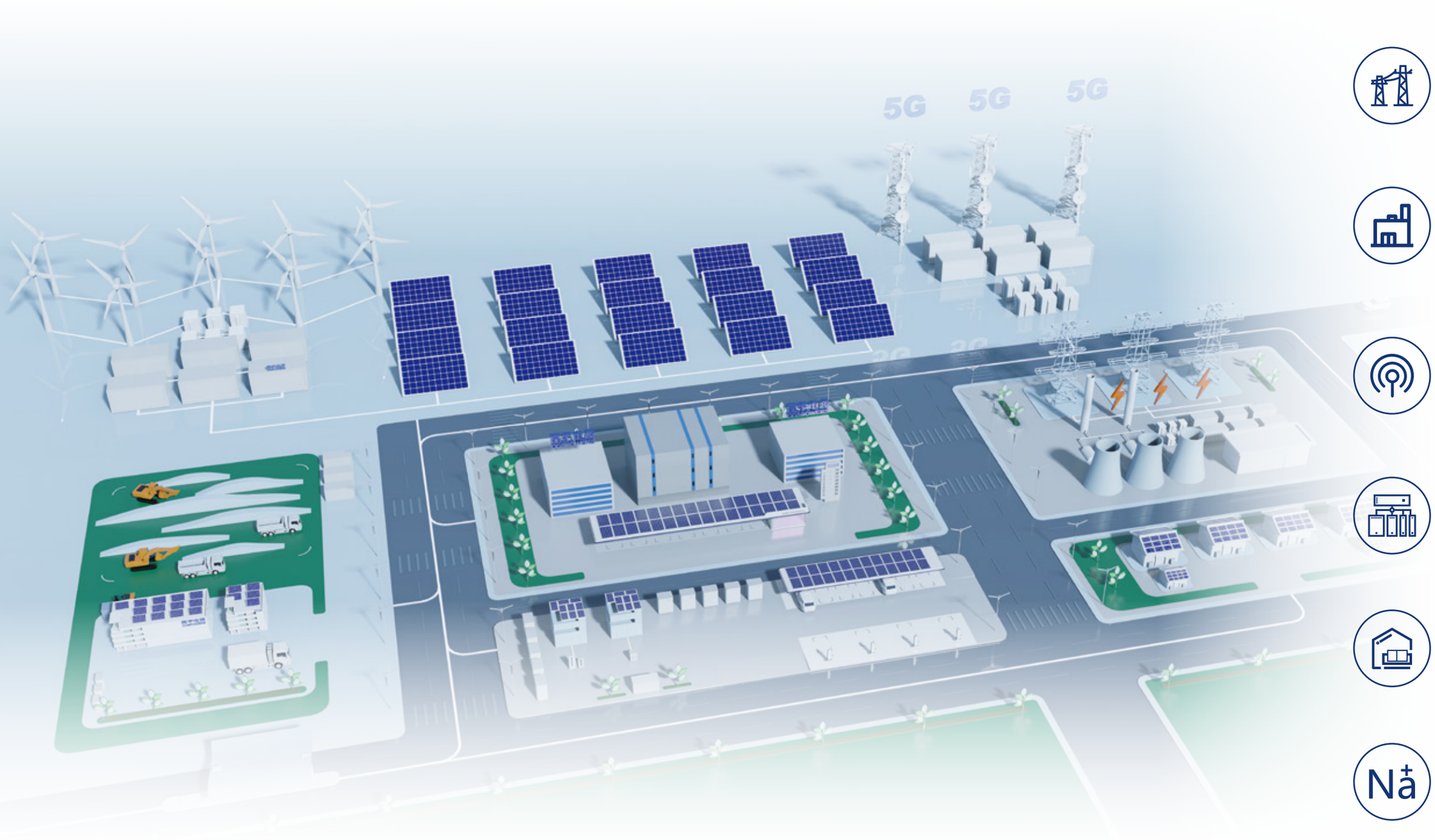
校企合作 University-industry cooperation

哈尔滨工业大学	Harbin Institute of Technology
中南大学	Central South University
哈尔滨工程大学	Harbin Engineering University
济南大学	University of Jinan

业务布局 Business Layout

构建储能锂电平台，助力实现碳中和

Build energy storage lithium level station, assistant to achieve carbon neutrality.



电力储能
Electric energy storage

工商业储能
Industrial and commercial energy storage

通信储能
Communication energy storage

数据中心储能
Data Center energy storage

户用储能
Househould energy storage

钠电储能
Sodium-Ion Battery Energy Storage

全球解决方案 Global Solutions

电芯
Energy Storage Cell

· 锂离子叠片电芯

· 钠离子叠片电芯

· Lithium ion laminated cell
· Sodium ion laminated cell

PACK集成
PACK Integration

· 安全稳定，可靠高效

· 集成液冷，超长寿命

· Safe, Stable, Reliable and Efficient
· Integrated Liquid Cooling,Ultra-Long Lifespan

电池系统
Battery System

· 全场景广适配，多样成组选择

· 轻量化高强度，满足用户所需

· Wide Adaptability for All Scenarios, Diverse Configuration Options
· Lightweight yet High Strength, Meeting User Requirements

昆宇电源AI智慧云平台
Cospowers AI Smart Cloud Platform

· 智能诊断、智慧遥测

· 超前遥调、智能遥控

· Intelligent Diagnosis, Smart Telemetry
· Advanced Remote Adjustment, Intelligent Remote Control

昆宇电源能量管理系统
Cospowers Energy Management System

· 监测调度、智慧评估

· 安全管理、能量预测

· Monitoring and Dispatching, Smart Assessment
· Safety Management, Energy Forecasting

昆宇电源电池管理系统
Cospowers Battery Management System

· 满足国际主流客户需求

· 满足GB/T-34131标准

· Meets the Requirements of Mainstream International Clients
· Compliant with the GB/T-34131 Standard

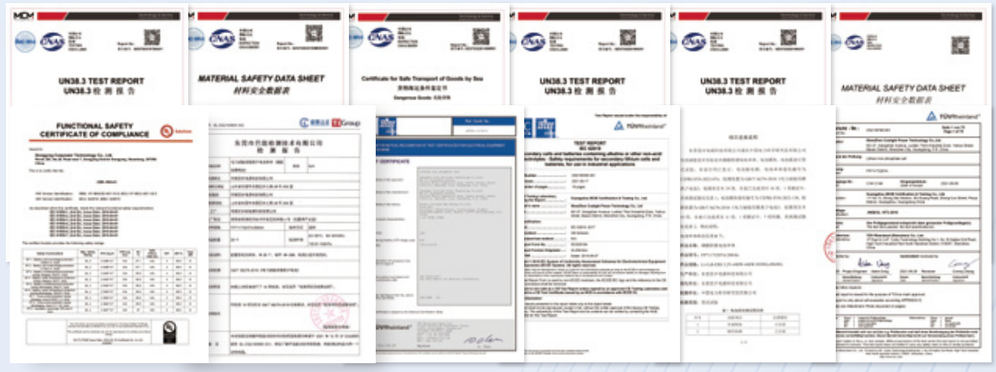
产品认证 Product Certification

国内外权威机构认证 Certification by domestic and foreign authorities

UN38.3、UN3536、IEC62619、IEC62620、IEC62109、IEC61508、IEC62040、IEC62133、IEC62933、CE-EMC、CE-LVD、ROHS、UL1642、UL1973、UL9540A、UL9540、UL1741、NFPA855、YD/T2344.1、GB/T36276、GB44240

各系列体系认证 Each series of system certification

ISO9001：2015、ISO14001：2015、ISO45001：2018



品牌声誉 Brand Reputation

Tier1
彭博全球一级
储能厂商
数据来源：Bloomberg

BloombergNEF Global Tier 1 Energy Storage Manufacturer

Tier1
2025年全球Tier 1
储能系统供应商
数据来源：邓白氏、SMM

2025 Global Tier 1 Energy Storage System Supplier

TOP500
2025中国能源
企业500强
数据来源：中国能源报、中国能源研究会

2025 China's Top 500 Energy Enterprises

TOP100
2025中国企业全球化
新势力100强
数据来源：创业邦

2025 China's New Top 100 Globalization Enterprises

TOP10
2025年度储能电池
十大供应商
数据来源：国际能源网、国能能源研究院

2025 Top 10 Energy Storage Battery Suppliers of the Year

TOP10
2025高工储能产业
“自产电池·系统榜单TOP10”
数据来源：GGII

2025 GGII Top 10 Energy Storage Industry "Self-Produced Battery · System List"

TOP4
2024年中国通信储能
锂电池全球市场出货量
数据来源：GGII

Global Market Shipment of China's Communication Energy Storage Lithium Batteries in 2024

TOP8
2024年中国储能系统(直流侧)
全球市场出货量
数据来源：GGII

Global Market Shipment of China's Energy Storage Systems (DC Side) in 2024

· 国家级知识产权优势企业
· 应对气候变化-中国【碳路者】先锋企业
· 全国首批钠离子电池测评通过单位
· 山东省质量标杆企业

· National Intellectual Property Advantage Enterprise
· Climate Action - China "Carbon Pathfinder" Pioneer Enterprise
· Among the First Batch of Units in China to Pass Sodium-Ion Battery Assessment
· Shandong Provincial Quality Benchmark Enterprise

· 国家级专精特新“小巨人”企业
· 湖南省制造业单项冠军企业
· 湖南省绿色制造单位
· 山东省企业技术中心

· National Specialized and Sophisticated "Little Giant" Enterprise
· Hunan Provincial Manufacturing Champion Enterprise
· Hunan Provincial Green Manufacturing Unitn enterprises
· Shandong Provincial Enterprise Technology Center

智能制造系统 Intelligent Manufacturing System

智能人力管理
Intelligent manpower management

全岗位生命周期智能管理，有效保障产品可靠交付。

The whole post life cycle intelligent management,effectively ensure the reliable delivery of products.

自动化柔性生产
Automated flexible production

全自动智能产线，柔性化、大规模生产，提高产品一致性。

Automatic intelligent production line, flexible, large-scale production, improve product consistency.

全流程精准管控
Precise control of the whole process

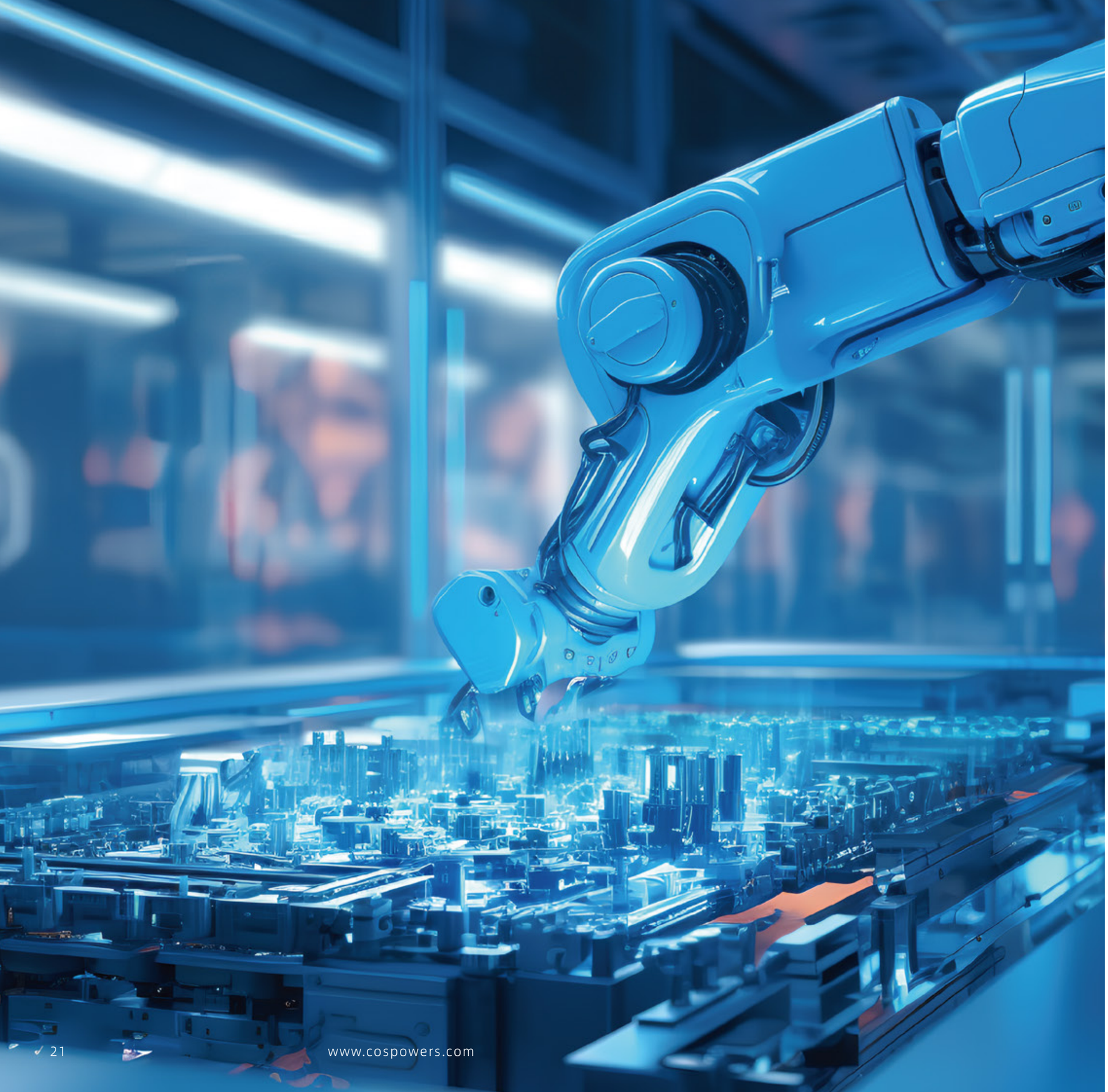
智能识别，精准追溯，保证产品质量水平。

Intelligent identification, accurate traceability,to ensure product quality level.

透明信息化管理
Transparent information management

IoT大数据，MES系统，透明可视化管理。

IoT big data, MES system, transparent visual management.



全生命周期管理与服务

Full life cycle management and services

以客户价值为中心，建立全方位的技术质量标准化管理；

Take customer value as the center, establish a full range of technical quality standardization management;

基于智能工厂，高度自动化产线，精准监控，实现一流的生产周期和交付能力；

Based on smart factory, highly automated production line, accurate monitoring, to achieve first-class production cycle and delivery capability;

全栈自研的产品研发战略：

贯穿电芯材料、电芯制造、BMS、PACK模组、系统集成、云数据、系统测试、整柜运输、交付客户等全生产链管控，提升产品可靠性；

Full-stack self-developed product development strategy: through the whole production chain control of cell materials, cell manufacturing, BMS, PACK modules, system integration, cloud data, system testing, FCL transportation, delivery to customers, etc., to improve product reliability;

零碳未来 Zero Carbon Future

以“助力绿水青山，共享清洁能源”为使命，帮助每一位用户迈出绿能低碳的第一步。

With the mission of "Promote ecological conservation, share clean energy", we help every user take the first step of green energy and low carbon.

全球累计出货量超
Global cumulative shipments exceed

23GWh

生产清洁电能
Roduce clean electricity

230GWh+

减少二氧化碳排放
Reduce CO_2 emissions

16300+T

节省燃煤
Save coal

6300+T

增加植树
Increase planting

208000+

*数据截止至2025年底
Data is available until the end of 2025

德国12MW/10.02MWh储能项目
Germany 12MW/10.02MWh Energy Storage Project

针对当地客户对高效用能、削峰填谷及VPP虚拟电厂的多元需求，昆宇电源提供了定制化的一体化储能解决方案。该项目采用公司自研的835kWh储能产品，该产品集成了高安全性电池管理系统与智能温控技术，能够有效提升能源利用效率，降低运营成本，满足欧洲市场对储能产品在安全性、可靠性及环境适应性方面的严苛要求。

In response to local customers' diverse needs for efficient energy utilization, peak shaving and valley filling, and VPP (Virtual Power Plant) participation, Cospowers provided a customized integrated energy storage solution. The project adopts the company's self-developed 835kWh energy storage product, which integrates a high-safety battery management system and intelligent temperature control technology. It effectively improves energy utilization efficiency, reduces operating costs, and meets the stringent European market requirements for safety, reliability, and environmental adaptability of energy storage products.

保加利亚200MW/800MWh电池储能系统项目
Bulgaria 200MW/800MWh Battery Energy Storage System (BESS) Projec

该项目不仅为当地电网提供了稳定可靠的电力调节能力，还显著提升了可再生能源的并网效率。它能够在用电高峰时持续输出电力，在电网需求较低时储存多余电能，从而有效平衡供需波动，增强电网韧性，助力保加利亚乃至欧洲地区更高效、更清洁的电力系统建设。

This project not only provides the local power grid with stable and reliable power regulation capacity but also significantly enhances the grid integration efficiency of renewable energy. It can continuously supply electricity during peak demand periods and store surplus power when grid demand is low, thereby effectively balancing supply-demand fluctuations and enhancing grid resilience. This contributes to building a more efficient and cleaner power system for Bulgaria and even the broader European region.

电力储能应用案例 Electric Energy Storage Application Cases

西班牙54.92MW/250.72MWh储能系统混合项目
Spanish 54.92MW/250.72MWh Hybrid Energy Storage System Project

昆宇电源为西班牙提供的电池储能系统，成功赋能“光伏+储能”混合项目，实现了清洁电力的稳定并网与高效售电。该项目不仅通过平抑光伏发电波动，显著提升了电网的弹性与可再生能源的消纳能力；更以智慧储能解决方案，保障了电站的稳定运行与收益最大化。

COSPOWERS battery energy storage system, supplied to Spain, has successfully empowered a "photovoltaic + energy storage" hybrid project, achieving stable grid integration and efficient electricity sales of clean power. By mitigating fluctuations in photovoltaic power generation, this project significantly enhances grid flexibility and the absorption capacity of renewable energy. Moreover, its smart energy storage solution ensures stable operation and maximizes revenue for the power station.

拉脱维亚5MW/10MWh 储能系统项目
Latvia 5MW/10MWh Energy Storage System Project

在该项目中，昆宇团队深入调研当地用户的用电特征与运营痛点，通过定制化的储能系统设计，帮助客户有效平滑负荷曲线、优化能源成本结构，并为电网提供必要的辅助服务。

In this project, the COSPOWERS team conducted in-depth research on local users' electricity consumption patterns and operational challenges. Through customized energy storage system design, the team helped customers effectively smooth load curves, optimize energy cost structures, and provide essential auxiliary services to the power grid.

宁夏银川200MW/800MWh储能项目

200MW/800MWh Energy Storage Project in Yinchuan, Ningxia

并网后年供4.5亿千瓦时清洁电，惠9.2万户，省煤14.5万吨，减碳37.6万吨，9.4万亩草方格防风固沙，创新治沙经济，赋能宁夏绿色低碳发展。

Once connected to the grid, it will supply 450 million kWh of clean electricity annually, benefiting 92,000 households, saving 145,000 tons of coal and reducing carbon emissions by 376,000 tons. Meanwhile, 94,000 mu of straw checkerboards are used for windbreak and sand fixation, innovating the sand-control economy and empowering green and low-carbon development in Ningxia.

黑龙江伊春铁力年丰20MW风力发电20MW/40MWh储能项目

20MW Wind Power and 20MW/40MWh Battery Energy Storage Project in Nianfeng, Tieli, Yichun, Heilongjiang

该项目通过20MW储能系统，有效平滑风电出力、减少弃风限电，显著提升了风电场的可调度性与电网友好性，为高比例可再生能源区域电网提供了稳定支撑与灵活调节能力，是“清洁能源+储能”融合发展的标杆示范

This project utilizes a 20MW energy storage system to effectively smooth wind power output and reduce wind curtailment, significantly improving the dispatchability of the wind farm and its grid-friendliness. It provides stable support and flexible regulation capabilities for regional power grids with a high proportion of renewable energy, serving as a benchmark demonstration for the integrated development of "clean energy + energy storage."

电力储能应用案例 Electric Energy Storage Application Cases

安徽天长200MW渔光互补发电87.5MW/175MWh储能项目

200MW Aquaculture-Photovoltaic Complementary Power Generation and 87.5MW/175MWh Energy Storage Project in Tianchang, Anhui

项目灵活控制电网供应，有效地调节电网的拐点，平抑功率波动，削峰填谷，改善电能质量。同时有助于吸收光照、降低土地温度，具有重要的低碳环保价值。

The project enables flexible control of grid supply, effectively regulating grid inflection points, smoothing power fluctuations, and performing peak shaving and valley filling to improve power quality. Additionally, it helps absorb sunlight and lower ground temperature, offering significant low-carbon environmental benefits.

新疆乌恰50MW风能发电50MW/200MWh储能项目

50MW Wind Power Generation and 50MW/200MWh Energy Storage Project in Wuqia, Xinjiang

项目投产后，年发电量预计达5.26亿kWh，年节煤16.05万吨，减排CO2 43.8万吨、SO2 84.2万吨、NOx 94.2吨，显著减少化石能源依赖，兼具经济与环境双重效益，为公司高质量发展及区域绿色转型奠定坚实基础。

Upon commissioning, the project is expected to generate approximately 526 million kWh of electricity annually, save 160,500 tons of coal per year, and reduce emissions by 438,000 tons of CO_2, 842,000 tons of SO_2, and 94.2 tons of NOx. It significantly decreases reliance on fossil fuels while delivering both economic and environmental benefits, laying a solid foundation for the company's high-quality development and the region's green transition.

马达加斯加IVATO产业园光储柴一体化智能微电网项目
Madagascar IVATO Industrial Park Integrated Solar-Storage-Diesel Smart Microgrid Project

该项目充分利用当地丰富的太阳能资源，采用光储柴一体化储能解决方案，通过系统精准稳定电压，有效保障了园区供电稳定，减少了日均停电时间。项目凭借储能系统的灵活调节能力，有效降低了园区对高价进口化石燃料的依赖，缓解了高峰时段用电压力。这一微电网系统在满足园区独特用能需求的同时，显著助力其削减用能成本，实现了可靠供电与最佳经济效益的统一。

This project fully leverages the region's abundant solar resources by adopting an integrated solar-storage-diesel energy storage solution. It ensures stable power supply to the park through precise and reliable voltage regulation, effectively reducing the average daily power outage time. With the flexible regulation capability of the energy storage system, the project significantly decreases the park's reliance on expensive imported fossil fuels and alleviates peak-hour electricity demand pressure. This microgrid system not only meets the park's unique energy needs but also substantially helps lower energy costs, achieving a balance between reliable power supply and optimal economic benefits.

美国工商业储能项目
U.S. Commercial & Industrial Energy

该项目为企业提供了稳定可靠的电能支持，通过智能负荷管理有效削减峰值电费，助力实现经济、高效的可持续能源运营。

This project provides enterprises with stable and reliable power support, effectively reduces peak electricity costs through intelligent load management, and facilitates economical, efficient, and sustainable energy operations.

工商业储能应用案例 Industrial&Commercial Energy Storage Application Cases

苏格兰工商业储能项目
Scotland Commercial & Industrial Energy

该项目通过智能储能为工业用户提供可靠的电力保障与峰谷套利，有效降低运营成本并支持绿色能源高效利用。

This project provides industrial users with reliable power support and peak-valley arbitrage through intelligent energy storage, effectively reducing operational costs and supporting the efficient utilization of green energy.

山东油田直流微网与柔性调控光储风一体化储能项目
Shandong Oilfield DC Microgrid with Flexible Solar-Storage-Wind Integrated Energy Storage System

该项目是昆宇电源“光伏+储能+柔性控制”一体化解决方案在传统油田开采领域的革新应用。通过构建直流微网，实现绿电直供与负荷柔性调控，助力油田将绿电替代率提升至75%，并显著降低吨耗与用电成本。

This project represents an innovative application of COSPOWERS' integrated "photovoltaic + energy storage + flexible control" solution in the traditional oil field extraction sector. By constructing a DC microgrid, it achieves direct supply of green electricity and flexible load regulation, helping the oil field increase its green electricity substitution rate to 75% and significantly reduce energy consumption per ton and electricity costs.

挪威工商业储能项目
Norway Commercial & Industrial Energy

该项目通过智能峰谷调节降低用能成本，同时增强供电可靠性，助力客户实现高效、可持续的能源管理。

This project reduces energy costs through intelligent peak and off-peak regulation, while enhancing power supply reliability, helping customers achieve efficient and sustainable energy management.

美国离网光储一体化备电储能项目
U.S. Off-Grid Solar-Storage Integrated Backup Power Project

该项目是昆宇电源为美国客户提供的光储一体化标杆解决方案。系统专为严苛戈壁环境设计，以高可靠储能为核心，确保离网条件下，服务器24小时不间断运行。

This project represents a benchmark integrated photovoltaic and energy storage solution provided by COSPOWERS Power for a US client. Specifically designed for harsh desert environments, the system centers on highly reliable energy storage to ensure 24/7 uninterrupted operation of servers under off-grid conditions.

工商业储能应用案例 Industrial&Commercial Energy Storage Application Cases

缅甸工商业储能项目
Myanmar Commercial & Industrial Energy Storage Project

通过峰谷价差套利、需量电费削减等方式获取的收益，降低企业用电成本。集装箱储能电站通过EMS能源管理系统实时采集10kV供电专线输送功率、储能并网点所在变压器负载率，配合昆宇电源云平台，实时提供最优充放电控制策略，高效完成储能系统充放电，同时使厂区有功功率达到自平衡。

The project reduces corporate electricity costs by generating revenue through methods such as peak-valley price arbitrage and demand charge reduction. The containerized energy storage power station utilizes its EMS energy management system to collect real-time data on the transmission power of the dedicated 10kV power supply line and the load rate of the transformer at the energy storage grid connection point. In coordination with COSPOWERS's cloud platform, the system provides real-time optimal charging and discharging control strategies. This enables efficient operation of the energy storage system while allowing the factory's active power to achieve self-balance.

江苏泰兴市某服装水洗工厂工商业储能项目
Jiangsu Taixing Garment Washing Factory Commercial & Industrial Energy Storage Project

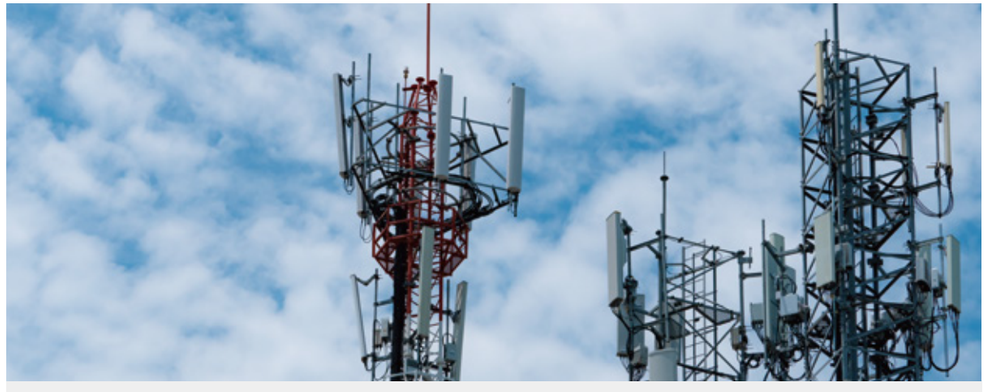
该项目通过高效储能系统，显著削峰填谷、降低用电成本，保障生产连续稳定运行；接入虚拟电厂，提供电力辅助服务，增加额外收益，缩短投资回本年限；同时提升厂区绿电比例，为高耗能产业的可持续运营提供了可靠、经济的智慧能源解决方案。

Through an efficient energy storage system, this project significantly achieves peak shaving and valley filling, reduces electricity costs, and ensures continuous and stable production operations. By connecting to a virtual power plant, it provides power auxiliary services, generates additional revenue, and shortens the investment payback period. Additionally, it increases the proportion of green electricity usage in the facility, offering a reliable and cost-effective smart energy solution for the sustainable operation of high energy-consuming industries.

中国铁塔浙江智慧锂电项目
China Tower Zhejiang Smart Lithium Project

昆宇电源提供的智慧锂电储能产品通过先进的BMS电池管理系统与丰富的工作模式实现了与多种不同电池混合使用。避免了资产浪费，储能配置更灵活、安全性及智能化程度更高；运输与维护更方便简易。

The smart lithium energy storage products provided by Cospowers enable mixed use with multiple battery types through an advanced BMS (Battery Management System) and diverse operational modes. Their mixed deployment with lead-acid batteries, as well as new and old echelon batteries, offers greater flexibility in the renovation of old base station energy storage systems. This approach avoids asset waste, allows more flexible energy storage configuration, and enhances safety and intelligence. It also simplifies transportation and maintenance.



中国移动湖南5G微站一体化项目
China Mobile Hunan 5G Micro-Station Integrated Project

该项目中，为湖南5G微站提供了高度集成的一体化储能解决方案。该系统保障了基站在市电中断或波动时的持续、稳定供电，有力支撑了5G网络的高可靠性与广域覆盖。

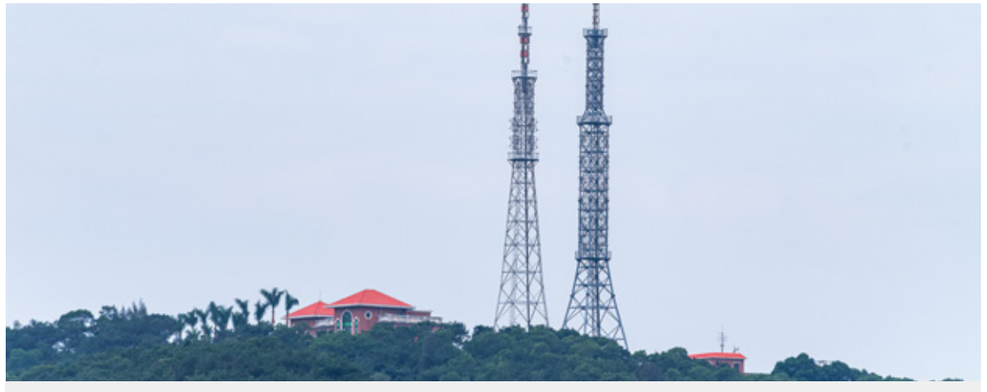
In this project, a highly integrated energy storage solution was provided for 5G micro base stations in Hunan. The system ensures continuous and stable power supply to the base stations during grid power interruption or fluctuation, thereby strongly supporting the high reliability and extensive coverage of the 5G network.

通信储能应用案例 Communication Energy Storage Application Case

韩国KT电信基站项目
South Korea KT Telecom Base Station Project

韩国KT基站利用备电模块的意义在于确保基站在主电源故障或停电等情况下能够继续提供通信服务，从而保障通信网络的稳定性和可靠性。备电模块的作用是提供备用的电源供应，以应对主电源失效的情况，从而避免因电源故障而导致基站停运，给用户带来不便和影响通信服务质量。

The purpose of utilizing backup power modules in KT base stations in South Korea is to ensure continuous communication services in the event of main power failures or power outages, thereby maintaining the stability and reliability of the communication network. The role of backup power modules is to provide an alternative power supply to address main power failures, preventing base station shutdowns caused by power issues. This avoids inconvenience to users and safeguards the quality of communication services.



柬埔寨Metpone基站项目
Cambodia Metfone Base Station Project

在柬埔寨，Metpone基站储能项目对保障基站用电具有重要意义。由于该地区的电力基础设施相对薄弱，时常会出现停电的情况，而Metpone基站的备电系统能够为基站提供稳定的电力供应，确保通信网络的正常运行。

In Cambodia, the Metfone base station energy storage project plays a crucial role in ensuring reliable power supply for base stations. Due to the relatively weak power infrastructure in the region, power outages occur frequently. The backup power system at Metfone base stations provides a stable power supply, ensuring the normal operation of the communication network.

上海移动临港IDC数据中心UPS项目
Shanghai Mobile Lingang IDC Data Center UPS Project

该项目为上海移动临港数据中心提供高可靠电力保障，通过优化空间布局与室外电池部署，同步提升安全性与机房可用面积。方案具备强扩展性，支持灵活并联，并借助智能化监控与远程管理，实现电池系统的预测性维护与高效运营。

This project provides high-reliability power protection for the Shanghai Mobile Lingang Data Center. By optimizing spatial layout and outdoor battery deployment, it simultaneously enhances safety and increases usable space within the equipment room. The solution offers strong scalability, supports flexible parallel connection, and utilizes intelligent monitoring and remote management to achieve predictive maintenance and efficient operation of the battery system.

中国联通山西数据中心项目
China Unicom Shanxi Data Center Project

数据中心电池系统的存在，可以在主电源出现故障时，迅速切换到备用电源，保证数据中心的可靠性。此外，备电系统还可以在主电源维护或升级时，提供电力支持，进一步提高了数据中心的可靠性，降低数据中心的运营风险。

The presence of a data center battery system enables rapid switching to backup power in the event of primary power source failure, ensuring the reliability of the data center. Additionally, the backup power system can provide electricity support during maintenance or upgrades of the primary power source, further enhancing the data center's reliability and reducing its operational risks.

数据中心储能应用案例 Data Center Energy Storage Application Case

韩国青州数据中心UPS备电锂电池
South Korea Cheongju Data Center UPS Backup Lithium

为韩国青州数据中心提供的高性能锂电池备电解决方案，以极高的可靠性确保了核心数据负载的“零闪断”运行，在极端电力环境下保障数据业务的连续性。

This high-reliability lithium battery backup power solution for the Cheongju Data Center in South Korea ensures "zero interruption" operation for core data loads, guaranteeing the continuity of data services even under extreme power conditions.

韩国IDC数据中心项目
South Korea IDC Data Center Project

该项目以全周期高可靠支撑核心负载连续运行，有效应对电网波动与突发断电，保障数据业务“零中断”。方案兼具高功率密度与长循环寿命，显著优化数据中心能效与空间利用率，助力客户降低运营成本。

This project provides full-cycle high reliability to support the continuous operation of core loads, effectively addressing grid fluctuations and sudden power outages to ensure "zero interruption" of data services. The solution combines high power density with long cycle life, significantly optimizing data center energy efficiency and space utilization, and helping customers reduce operational costs.

中国移动宁夏公司数据中心分布式光伏项目
China Mobile Ningxia Data Center Distributed Photovoltaic Project

该项目充分利用西北充沛的光照资源，通过“光伏+钠电”一体化解决方案，为数据中心提供了高安全、低成本、耐宽温的绿色备电与灵活调峰能力，有效提升了数据中心能效与绿电比例，为通信行业实现低碳、高可靠的能源转型提供了创新路径与可靠选择。

This project fully utilizes the abundant solar resources in Northwest China. Through an integrated "photovoltaic + sodium battery" solution, it provides high safety, low cost, and wide-temperature-tolerant green backup power and flexible peak-shaving capabilities for data centers. This effectively improves the energy efficiency and green power ratio of data centers, offering innovative pathways and reliable choices for the communications industry to achieve low-carbon, highly reliable energy transition.

中国移动黑龙江智慧钠电项目
China Mobile Heilongjiang Smart Sodium Battery Project

昆宇电源的智慧钠电项目携手中国移动，在黑龙江成功完成了试点安装工作。该项目主要应用在高寒无取暖等条件恶劣地区，减少取暖带来的额外费用支出。

The COSPOWERS Smart Sodium Battery Project, in collaboration with China Mobile, has successfully completed pilot installations in Heilongjiang. The project is primarily applied in harsh environments such as extremely cold regions without heating facilities, reducing additional expenses associated with heating.

钠电储能应用案例 Sodium Battery Energy Storage Application Case

中国铁塔黑龙江智慧钠电项目
China Tower Heilongjiang Smart Sodium Battery Project

在极端低温环境下测试钠电池的卓越低温性能。具体场景为铁塔计算机房，采用纯钠电池供电方案，通过智能电池管理系统（BMS）连接8组CN4875T并联48V600Ah系统，实现基站设备的智能管理。

Testing the exceptional low-temperature performance of sodium-ion batteries in extreme cold environments. The specific scenario involves a tower computer room powered by a pure sodium-ion battery solution, featuring an intelligent Battery Management System (BMS) connecting 8 sets of CN4875T in parallel to form a 48V 600Ah system, enabling intelligent management of base station equipment.

中国铁塔甘肃智慧钠电项目
China Tower Gansu Smart Sodium Battery Project

作为塔式路边基站，该站点采用钠离子电池与铅酸电池混合场景，配置1组CN4875T电池组及200Ah铅酸电池组，通过先进的BMS电池管理系统和丰富的运行模式，可实现多种电池的灵活混用。铅酸电池与新旧梯级电池的混用，使旧基站的储能改造更加灵活，避免了资产浪费。

As a tower roadside base station, this site adopts a hybrid scenario combining sodium-ion batteries and lead-acid batteries, configured with one set of CN4875T battery packs and 200Ah lead-acid battery packs. Through an advanced BMS and versatile operating modes, flexible mixing of various batteries is achieved. The combination of lead-acid batteries with old and new tiered batteries makes energy storage retrofitting for old base stations more flexible and avoids asset wastage.

售后服务 After Aales Aervice

昆宇电源以提升客户满意度为导向，为客户提供高品质、高效、专业的技术服务。

Cospowers supply to enhance customer satisfaction as the guidance, to provide customers with high quality, efficient, professional technical services.

2小时实时响应
8小时抵达现场
24小时解决方案
72小时故障排除

2 hours real-time response
8 hours to the scene
24 hour solution
72 hours troubleshooting

在全球21个国家和地区设立分支机构
并拥有近30个地区服务中心、零配件仓库

We have branches in 21countries and regions around the world
And has nearly 30 regional service centers, spare parts warehouse.

全年提供大型项目技术服务100+次
现场安装维护培训工作20+次

Provide large-scale project technical services 100+ times a year
On-site installation and maintenance training work 20+ times.

全年电站回访省份10+个

Power stations visited 10+ provinces throughout the year.

合作客户 Cooperative Customer

70+
全球业务覆盖
Global service coverage

500+
全球伙伴
Global partner