

Power Equipment & New Energy & Utilities & ESG

23Q1 电池行业更新：动力稳增长，储能略低于预期，新技术不断落地

23Q1 battery sector updates: steady growth in power, lower than expected in energy storage, and new battery technologies continue to land

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热点速评 Flash Analysis

(Please see APPENDIX 1 for English summary)

23Q1 动力电池出货保持稳定增长，储能电池出货低于预期。SNE Research 的最新统计数据显示，2023 年一季度，全球动力电池装车量达到 133.0GWh，同比增长 38.6%。宁德时代稳居第一，比亚迪以超过两倍的增幅上升至第二，LG 能源排名第三。韩国三家电池制造商（三星 SDI、LG 和 SK）的市场份额合计为 24.7%，较去年同期下降 1.3%，但总体呈上升趋势，LG 能源排名第三，同比增长 37.5%，SK 排名第五，同比增长 5.1%，三星 SDI 排名第六，同比增长 52.9%。2023 年一季度，宁德时代动力电池装车量达 46.6GWh，同比增长 35.9%。其市场份额达到 35.0%，稳居全球第一。储能方面，据 GGII 数据，2023 年一季度全球储能电池出货量总计达到 43.9GWh，同比增长 28%，其中户储市场出货低于 4GWh，不及预期。宁德时代以约 14GWh 储能电池出货量稳居第一，比亚迪、瑞浦兰钧、亿纬锂能、鹏辉能源居于第二至五位，出货皆超过 3GWh。23Q1 由于电池级碳酸锂价格持续下跌，下游客户多处于观望，储能的需求增长受影响，电池厂商一季度以清理库存为主，同时欧洲电价和天然气价格持续下行，2023 Q1 能源价格较 2022Q3 大幅回落，欧洲能源危机的影响有所缓解，居民的户储装机意愿下降，这些因素共同造成了一季度储能电池出货量不及预期。预计 5 月后电池厂商排产逐渐恢复，且碳酸锂价格企稳，储能需求的增长回升，2023 全年储能电池出货高增长的预期不变。

电池新技术逐渐实现落地应用，多家企业关于钠电池、固态/半固态、大圆柱、麒麟电池及凝聚态电池的产业化进展相继发布。2023 年是钠电池产业化元年，钠电池有望用于大规模储能与中低速车市场，目前多家企业发布了最新的钠电池研发与应用进展。1 月 9 日，维科技术公告，钠电规划产能 2GWh，投资金额预计 6.8 亿元，主要面向低速车和储能；2 月 23 日，中科海钠宣布钠电池在江淮思皓 EX10 花仙子上首次装车；3 月 3 日，派能科技公告，全资子公司江苏中兴派能电池拟于江苏省仪征经济开发区建设派能科技 1GWh 钠离子电池项目，项目总投资 2.2 亿元，预计建设周期 6 个月；3 月 17 日，雅迪华宇发布了极钠 1 号钠电池，以及钠电池两轮车雅迪极钠 S9；4 月 17 日，宁德时代宣布其钠离子电池将首发落地奇瑞车型，能量密度达 160Wh/kg，常温下充电 15 分钟，电量可达 80% 以上。固态电池是通过采用固态电解质，兼顾了电池的高安全性与高比容量，目前多家企业已发布相应的研发与应用进展，22 年 5 月，国轩高科发布半固态电池，单体能量密度达 360Wh/kg，配套电池包达 160KWh，续航里程超 1000km，预计 23 下半年批量交付；22 年 9 月，孚能科技正式推出全新的半固态软包动力电池，电芯能量密度达到 330Wh/kg；22 年 11 月，卫蓝新能源的湖州年产 20GWh 固态电池项目签约，同月第一颗固态动力电芯产品下线；23 年 1 月，赣锋锂业公告拟建重庆市涪陵高新区建设年产 24GWh 动力电池项目，规划包括固态电池，计划总投资 100 亿；2 月，清陶能源与成都郫都区签约建设年产 15GWh 动力固态电池储能产业基地项目，总投资 100 亿元，首条生产线设计产能 1GWh。此外，4 月 19 日，宁德时代发布凝聚态电池，采用高动力仿生凝聚态电解质，聚合了超高比能正极、新型负极、隔离膜、工艺等一系列技术，电芯单体能量密度高达 500Wh/kg；宁德的第三代 CTP 麒麟电池已实现配套极氪 009、001 量产装车，4C 快充版麒麟电池也将配套理想首款纯电车型。4 月 2 日，亿纬锂能宣布其 4695 大圆柱电池将于今年量产交付，亿纬的大圆柱电池 46950 产品具有 350Wh/kg 的单体能量密度，支持 9 分钟超快充。

总结：23Q1 全球动力电池装车量达到 133.0GWh，同比增长 38.6%，宁德时代、比亚迪、LG 能源分别排名前三位。储能方面，23Q1 全球储能电池出货量总计达到 43.9GWh，同比增长 28%，其中户储市场出货低于 4GWh，不及预期。宁德时代、比亚迪、瑞浦兰钧、亿纬锂能、鹏辉能源位居前五位。海外电动车市场仍处于高增速，中国电池厂商出海持续推进；23Q1 由于电池级碳酸锂价格持续下跌，储能的需求增长受影响，同时欧洲电价和天然气价格持续下行，欧洲居民的户储装机意愿下降。预计 5 月后电池厂商排产逐渐恢复，且碳酸锂价格企稳，储能需求的增长回升，2023 全年储能电池出货高增长的预期不变。电池厂商的电池新技术逐步实现落地应用，包括钠电池、固态/半固态、大圆柱及凝聚态电池等，其中钠电池有望用于大规模储能与中低速车市场，固态电池采用固态电解质，兼顾了电池的高安全性与高比容量，麒麟电池与大圆柱电池有很高的电芯能量密度以及良好的快充性能。

投资建议：建议重点关注目前业绩增长确定性高的锂电板块，关注锂电池龙头企业的底部投资机会，包括动力和储能电池的一二线电池厂商宁德时代、亿纬锂能、鹏辉能源、国轩高科、比亚迪、派能科技等。

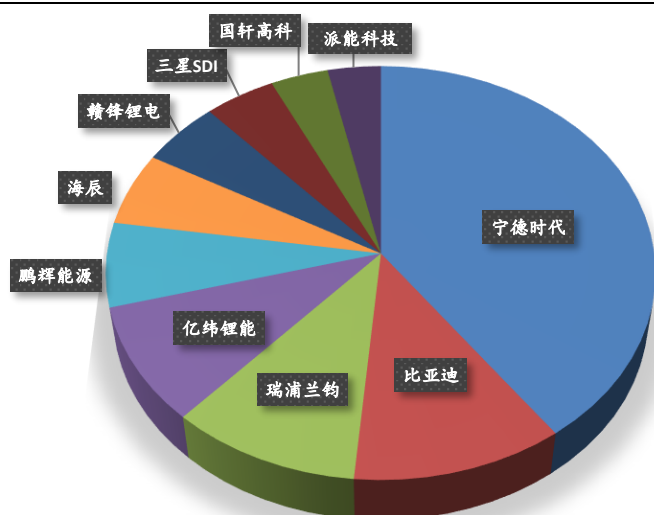
风险：新能源车销量不及预期，储能需求增长不及预期，电池价格战的影响加剧。

图表 1: 23 Q1 全球动力电池装车量前十名

	企业名称	装车量(GWh)	同比增长(yoy)	占比
1	宁德时代	46.6	35.9%	35.0%
2	比亚迪	21.5	115.5%	16.2%
3	LG 能源	19.3	37.5%	14.5%
4	松下	11.9	37.7%	9.0%
5	SK	7.1	5.1%	5.3%
6	三星 SDI	6.5	52.9%	4.9%
7	中创新航	5.7	39.8%	4.3%
8	国轩高科	2.9	13.7%	2.2%
9	亿纬锂能	2.4	75.5%	1.8%
10	欣旺达	1.9	28.5%	1.4%

资料来源: SNE Research, HTI

图表 2: 23 Q1 全球储能电池出货量前十名



资料来源: GGII, HTI

图表 3: 宁德时代凝聚态电池



资料来源: 宁德时代官网, HTI

图表 4: 宁德时代麒麟电池配套极氪 001



资料来源: 宁德时代官网, HTI

图表 5: 宁德时代钠离子电池发布



资料来源: 宁德时代官网, HTI

APPENDIX 1

Summary

In 23Q1, power battery shipments maintained steady growth, while energy storage battery shipments were lower than expected. The latest statistics from SNE Research show that in the first quarter of 2023, the global installed capacity of power batteries will reach 133.0GWh, a year-on-year increase of 38.6%. CATL ranked first, BYD rose to second with more than double the growth rate, and LG Energy ranked third. In terms of energy storage, according to GGII data, the total global energy storage battery shipments in the first quarter of 2023 will reach 43.9GWh, a year-on-year increase of 28%, of which the household storage market shipments will be lower than 4GWh, which is lower than expected. CATL ranks first with about 14GWh of energy storage battery shipments. BYD, Ruipu Energy, EVE Energy, and GZ Great Power Energy&Tech. rank second to fifth, with shipments exceeding 3GWh.

The application of new battery technologies has gradually been implemented, and many companies have released their industrialization progress on sodium batteries, solid/semi-solid batteries, large cylinders, Kirin batteries, and condensed matter batteries. 2023 is the first year of the industrialization of sodium batteries. Sodium batteries are expected to be used in large-scale energy storage and medium and low-speed vehicle markets. Solid-state batteries use solid-state electrolytes to take into account the high safety and high specific capacity of batteries. In addition, CATL released condensed matter batteries and the third-generation CTP Kirin battery has been mass-produced and landed. EVE also announced that its 4695 large cylindrical battery will be mass-produced and delivered this year.

Summary: In 23Q1, the global installed capacity of power batteries reached 133.0GWh, a year-on-year increase of 38.6%. CATL, BYD, and LG Energy ranked the top three respectively. In terms of energy storage, in 23Q1, global energy storage battery shipments totaled 43.9GWh, a year-on-year increase of 28%. Among them, household storage market shipments were lower than 4GWh, which was lower than expected. CATL, BYD, Ruipu Energy, EVE Energy, and GZ Great Power Energy&Tech. ranked the top five. The application of new battery technologies has gradually been implemented, and many companies have released their industrialization progress on sodium batteries, solid/semi-solid batteries, large cylinders, Kirin batteries, and condensed matter batteries.

Suggestions: We suggest to focus on the current lithium battery sector with high performance growth certainty, and pay attention to the bottom investment opportunities of leading lithium battery companies, including CATL, EVE Energy, GZ Great Power Energy&Tech., Gotion Hi-Tech, BYD and Paineng Tech., etc.

Risks: The sales of new energy vehicles are lower than expected; The growth of energy storage demand is lower than expected; The impact of battery price war is intensified.

附录 APPENDIX

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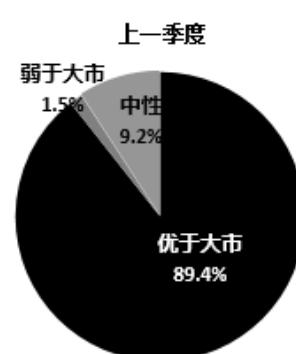
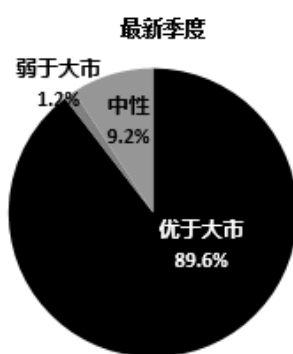
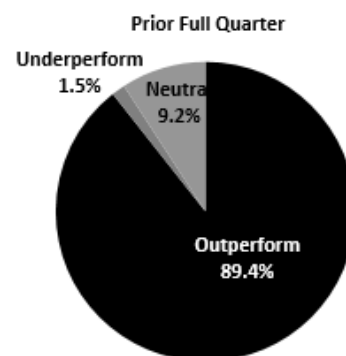
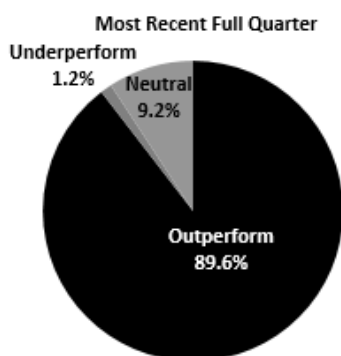
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