Global and China Li-ion Power Battery Industry Report, 2019-2025

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STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

Amid the thriving development of new energy vehicles, a total of 2,209,831 electric vehicles were sold globally in 2019, a year-on-year spurt of 14.5% and as a percentage of 2.5% in total automobile sales. Especially, Tesla surpassed BYD to rank first in the world with the highest sales up to 367,820 new energy vehicles in 2019, a 16.6% share of the global total. China, the world's largest new energy vehicle producer and seller, sold 1.206 million NEVs in 2019, dipping by 4% year on year with the ramp-down in subsidies for new energy vehicle and occupying 4.68% of the global total, including 972,000 battery electric vehicles with a year-on-year decrease of 1.2% and 232,000 PHEVs with an annualized drop of 14.4%.

In 2019, a total of 1,059,733 new energy passenger cars were sold in China, encompassing 853,492 battery electric cars and 206,241 plug-in hybrid cars. In this field, the sales champion BYD contributed 227,232 units or 21.4% of the total in 2019.

The boom of global new energy vehicles gives impetus to lithium-ion power battery industry whose shipments swelled 16.6% over the previous year to 116.6GWh in 2019.

Five Chinese companies, namely CATL, BYD, AESC (acquired by Envision), Guoxuan High-tech (Gotion) and Lishen Battery rank among top the 10 battery companies by shipments. CATL has become the global champion by power battery shipments for three consecutive years, with its shipments posting 32.5GWh in 2019 with an upsurge of 30.5% year on year, and sweeping 27.9 percent of global shipments.

Capacity Expansion Plans of Leading Lithium-ion Battery Manufacturers Worldwide

	Plans for Capacity Expansion
LG Chem	In December 2018, LG Chem made additional investment of EUR500 million in the battery plant at Wroclaw, Poland to raise annual battery output of such factory to 70GWh; LG Chem also planned to spend $1,630 million constructing the largest European battery plant in Poland; LG Chem announced its battery capacity would reach 90 GWh in 2020.
Samsung SDI	In April 2019, Samsung SDI planned to invest a total of roughly INR90 billion to INR100 billion ($130 million to $144 million) to establish a lithium-ion battery production base in India. Samsung SDI has a plan to set up its second factory in Hungary in 2020, involving four production lines with annual capacity up to 12 million units of power batteries. The company's production capacity is projected to reach 40GWh in 2022.
SKI	At the end of 2018, SKI planned the investment of KRW1.14 trillion to build a new power battery plant in the United States, with initial production target up to 9.8GWh per year, and the capacity to be increased to 55GWh/year or so with the additional investment. Moreover, SKI plans to expand the capacity of South Korea-based Seosan-si factory to 5GWh.
Panasonic	Its power battery capacity will reach 72GWh in 2020.
Envision AESC	In February 2019, the Jiangyin-based smart battery project with the investment of RMB22 billion from Envision AESC was kicked off. The project will produce 20GWh/year ternary lithium-ion power batteries and electrode materials as it is completed. The project is to be put into full production in 2024.
BYD	BYD's planned capacity of power battery is 110GWh, but plus joint ventures' 10GWh capacity, reaches 120 GWh.
CATL	CATL's factory in Germany started construction in October 2019 and is expected to realize 14GWh battery capacity in 2022. On February 26, 2020, CATL planned to invest RMB10 billion for building CATL's Cheliwan (Jiaocheng District of Ningde City) Lithium-ion Battery Manufacturing Base project which is to go into operation in late 2021 with annual capacity of 45GWh. Also, CATL released a non-public offering of shares plan to raise RMB20 billion for several projects. There will be an addition of 52 GWh/year lithium-ion battery capacity once projects become operational. As expected, CATL will boast total capacity of 239.9GWh/year in 2023.
Lishen Battery	It plans a capacity up to 30GWh in 2020 and 50GWh in 2025.

Source: ResearchInChina

In 2019, 62.28GWh power lithium batteries were installed in China, rising by 9.3% from a year earlier. Assuming the output of new energy vehicles is 5.9 million units in 2025, the demand for power batteries will reach 330.6GWh with a CAGR of 32.1% from 62.28GWh in 2019.

In China, power batteries are led by ternary battery. The installed capacity of ternary batteries offered by 64 companies for the Chinese new energy vehicle market escalated 22.4% year on year to 40.92GWh in 2019, accounting for 65.7% of the total installed capacity (nearly 7 percentage points higher than that in 2018). The installed capacity of LiFePO4 power batteries provided by 38 companies fell by 6.4% to 20.26GWh, occupying 32.5% of the total installed capacity (down about 6 percentage points from 2018). The installed capacity of other types of power batteries was 1.11GWh, making up 1.8% of the total.

Highlights in the report:

- Economic environment and policy climate for lithium power battery industry;
- Lithium power battery industry chain (key materials, battery cells, packaging and BMS);
- Global and China new energy vehicle industry;
- Global and China lithium power battery industry (demand, price, market size and competitive pattern);
- 5 global and 11 Chinese lithium power battery companies (technology, customers, lithium power battery business, capacity and production & sales).

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Room 2-626, 6th Floor, No.1, Shanyuan Street, Haidian District, Beijing, 100080
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