**Global and China Lithium-ion Battery** 

Anode Material Industry Report, 2019-2025

Aug. 2019



The Vertical Portal for China Business Intelligence

#### 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 costeffective 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.

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### Abstract

Lithium-ion battery finds wide application in consumer electronics and gets increasingly used in automotive sector, with its market having been ballooning since 2009 and approximating \$43.5 billion worldwide in 2018. As a big producer of lithium-ion battery, China's output of lithium-ion battery reached 102 GWh in 2018 as a percentage of 53.4% in the global total, ranking first in the world for ten consecutive years.

Anode materials make up 10% to 18% costs of materials for lithium-ion battery. In 2018, China's shipment of anode materials was 192 kilotons with an upsurge of 31.51% on an annualized basis, and is expected to see a fairly high growth rate in the forthcoming years and soar to 850 kilotons in 2025.

Lithium-ion battery prevails in the markets of power battery, consumer electronics and energy storage.

1) Power battery sales reached 65 GWh in 2018 with a spurt of 46.1% year on year due to strong demand from new energy vehicle, where lithium-ion battery finds most application;

2) Consumer battery market has matured over many years of development. The sales of lithium-ion battery for digital products edged down 2.2% year on year and posted 31.8 GWh in 2018 when the consumer electronics market was depressed. Nevertheless, the debut of 5G and flexible screen is conducive to sizable growth of the consumer battery market;

3)Energy storage battery market is still in its infancy but with huge potentials. In 2018, the energy storage battery market embraced considerable growth and its sales volume climbed to 5.2 GWh, jumping by 36.8% from the previous year thanks to the progression of telecommunication energy storage industry, the commercialization of electric energy storage market as well as the cost cuts of lithium iron phosphate battery.

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Of anode materials, artificial graphite and natural graphite hold a combined share of at least 90% and both have been spawned and utilized commercially. With superiorities in cyclic performance and safety, artificial graphite remains the mainstay of anode materials in China and gets used mostly in the power battery market and the high-end consumption market. In 2018, China's shipment of artificial graphite jumped to 133 kilotons (a 69.27% share of shipments of all anode materials), soaring by roughly 33% from a year earlier, presenting a CAGR of as high as 46.34% between 2014 and 2018

The global anode material market is almost monopolized by the four giants including Shenzhen BTR New Energy Materials Co., Ltd., Hitachi Chemical, Shanshan Technology Co., Ltd, and Mitsubishi Chemical, seizing 67% shares together by output worldwide. In China, the three including Shenzhen BTR New Energy Materials Co., Ltd., Ningbo Shanshan Co., Ltd and Jiangxi Zichen Technology Co., Ltd. compete fiercely, with CR3 standing at 61% and CR5 76%.

Being bullish about the future, the manufacturers of anode materials are vigorously expanding production capacities. In 2018, Shenzhen BTR New Energy Materials Co., Ltd. put new capacity of 30 kilotons into production, so did Ningbo Shanshan Co., Ltd's 110 kilotons. Jiangxi Zichen Technology will add new capacity of 20 kilotons in 2019. The industry is faced with overcapacity with capacity utilization less than 50%.

#### Future Trends:

The specific energy density of graphite is up to the limit, and the market is urgent for the new anode material of higher energy density. Silicon-carbon composite anode materials will be a direction.

Being squeezed by both upstream raw materials and downstream battery manufacturers, the price of anode materials will be a downward trend.

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Global and China Lithium-ion Battery Anode Material Industry Report, 2019-2025 highlights the following:

- Global lithium battery anode material market (scale & forecast, competitive landscape, the development of new anode materials, etc.;
- Chinese lithium battery anode material market (policies, market size & prediction, competitive pattern, price trend, etc.);
- Global and Chinese Markets of Such Upstream Materials for Anode Materials as graphite, silicon carbide, lithium titanate and graphene (market size, competitive pattern, import & export, price trend, etc.);
- Global and Chinese lithium battery markets (size, competition, and demand for anode materials and predictions, etc.);
- 9 global and 12 Chinese manufacturers of anode materials (profile, anode material business, development of siliconbased anode, production capacities of bases, operation and performance, etc.);
- 3 manufacturers of lithium titanate materials (profile, operation, lithium titanate business, etc.)

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