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

In 2016, the global shipment of cathode materials grew 26.7% year on year. Thanks to brisk demand from electric vehicles, LFP and NCA show rapid growth among which NCA gets primarily used for Panasonic 18650 cylindrical batteries (to be supplied to Tesla EVs) and substantial growth of LFP benefits mainly from China’s EV demand, particularly robust demand from electric buses as well as application in energy storage field.

Globally, the cathode materials used for electric passenger cars are mostly ternary materials and lithium manganate; however, Chinese electric passenger cars adopt both of LFP and ternary materials. Ternary materials tend to be the mainstream in the future. In the aspect of commercial vehicles, the lifting of the ban on ternary batteries for commercial vehicle in 2017 will conduce to the demand growth for ternary materials.

In 2016, China produced 161,600 tons of cathode materials, a year-on-year increase of 43%. Specifically, the LiFePO4 output soared 75% year on year to 57,000 tons, under the impetus of power batteries and energy storage lithium batteries. Driven by new energy passenger cars, lithium battery bicycles, medium and low-end digital lithium batteries and other markets, the output of ternary materials swelled 49% year on year to 54,300 tons. The LiCoO2 shipment jumped 9.4% year on year to 34,900 tons.

After experiencing the downturn in 2013-H1 2015, ternary materials witnessed rising penetration rates in all sub-fields with the rapid growth of new energy vehicles in H2 2015. In China, the average price of ternary materials ascended swiftly from H2 2015, and the NCM523 price hit RMB140,000 -150,000 / ton in 2016.

Major ternary material producers in China have begun to build new projects and expand capacity. In 2016, the overall capacity of top ten ternary material enterprises including Hunan Shanshan, Xiamen Tungsten, Ningbo Jinhe, Shenzhen Zhenhua and Xinxiang Tianli Energy fetched 30,000 tons, enjoying the market share of about 60%.

At present, only a small number of domestic cathode material enterprises boast high nickel NCM622 capacity, for instance, Beijing Easpring Material Technology is the largest Chinese enterprise with the NCM622 capacity of 2,800 tons, and will put its Jiangsu project phase II (NCM622 capacity: 4,000 tons) into production in 2017.
As concerns technology trends, the novel lithium-rich laminated ternary materials are possible to be utilized as the cathode material for future high-energy-density lithium-ion battery due to exceedingly high specific capacity and excellent cycling competence. Currently, first discharge of 0.1C (C stands for capacity) such material is higher than 250mAh/g and capacity retention ratio is above 90% after the cycling of thirty times, presenting remarkable electrochemical properties.

The report highlights the following:
◆ Supply and demand of ternary materials in China and the world, particularly the shares of applications in such fields as new energy vehicle and consumer electronics;
◆ Competitive landscape in China and beyond, covering domestic and overseas companies’ market share, capacity planning, market pattern, etc.;
◆ Technology routes and development trends of ternary materials in China and the world;
◆ Analysis on upstream and downstream market segments of ternary materials, consisting of cobalt metal, lithium carbonate, ternary precursor, ternary lithium battery, etc.;
◆ Key application growth points of ternary cathode materials, and analysis on electric vehicle industry in China and the world;
◆ Operation, technologies, development plans and production & sales dynamics of six manufacturers of ternary cathode materials from countries like Japan, S. Korea, Belgium and Germany;
◆ Operation, technologies, development plans and production & sales dynamics of fourteen Chinese ternary cathode material manufacturers;
◆ Operation, technologies, development plans and production & sales dynamics of seven producers of ternary lithium battery from nations such as Japan, S. Korea and Europe;
◆ Operation, technologies, development plans and production & sales dynamics of nine Chinese ternary lithium battery manufacturers.
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Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080
Phone: +86 10 82600828 ● Fax: +86 10 82601570 ● www.researchinchina.com ● report@researchinchina.com
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