



# Global and China Lithium Battery Anode Materials Industry Report, 2014-2017

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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

Lithium battery is composed mainly of cathode materials, anode materials, separator, and electrolyte, of which anode materials make up 5%-15% of lithium-ion battery costs, being one of important raw materials for lithium battery. Global lithium battery anode materials are now still dominated by natural graphite and artificial graphite, together accounting for roughly 85% in 2014. However, novel materials like mesocarbon microbeads (MCMB), lithium titanate (or lithium titanium oxide, LTO), and other anode materials see rapid growth in output.

In 2014, global lithium battery anode materials output totaled around 70,000 tons, concentrated in China and Japan, which together constituted over 95% of global anode materials sales volume. Rapid growth in global new energy vehicle market and accelerated application of lithium battery in communications and energy storage fields in the wake of the advent of 4G era will drive global demand for anode materials grow at a rate of more than 15% over the next three years.

Global anode materials industry is highly concentrated, with major manufacturers including Hitachi Chemical, JFE Chemical, Mitsubishi Chemical, BTR, and Ningbo Shanshan, which held a combined market share of over 80% in 2014, with Hitachi Chemical and Ningbo Shanshan specializing in artificial graphite anode materials, BTR and Mitsubishi Chemical in natural graphite anode materials, and JFE Chemical and Ningbo Shanshan in MCMB anode materials.



China abounds in graphite mineral resources, endowing the country with significant advantage in production costs of anode materials, and occupied 70% or so of global anode materials output in 2014. As anode materials production technologies of the Chinese companies become increasingly mature, home-made anode materials will gain more market shares.

As of the end of 2014, there were more than 50 producers of lithium battery anode materials in China, and most of them entered the field after 2010. In 2014, the top five lithium battery anode materials producers (by capacity) were BTR, Ningbo Shanshan, Shenzhen Sinuo Industrial Development, Jiangxi Zichen Technology, and Jiangxi Zhengtuo New Energy Technology, with their capacities totaling 67,000 tons, and BTR and Ningbo Shanshan taking approximately 60% of the Chinese market.

In recent years, due to falling cell price and fiercer competition in anode materials market in China, the prices and profits of anode materials in China continued to slide, and the trend is expected to last for the next three years. This will have small- and medium- sized enterprises lacking funds and technological innovation capabilities caught in deep waters, and even taken over or eliminated for some companies.

Global and China Lithium Battery Anode Materials Industry Report, 2014-2017 by ResearchInChina focuses on the following:

- Market size and competitive landscape of global lithium battery anode materials industry;
- Market size, competitive landscape, price trend and development forecast of China lithium battery anode materials industry;
- Supply & demand, competitive landscape, supporting relationship between upstream and downstream, development forecast of global and China lithium battery industry;
- Operation, anode materials business, and development forecast of 15 global and Chinese anode materials producers.

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