

# Global and China Lithium Battery Anode Materials Industry Report, 2016-2020

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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 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 battery is primarily composed of cathode materials, anode materials, separator, and electrolyte. Anode materials, one of vital raw materials, make up 5%-15% of lithium battery cost.

In 2015, global lithium battery anode materials sales amounted to 112,700 tons, mainly produced in China and Japan. As new energy vehicle sales climb year after year, global lithium battery anode materials sales is expected to maintain a growth rate of over 25% over the next five years.

Global lithium battery anode materials are still dominated by natural graphite and artificial graphite, together accounting for roughly 83% in 2015. However, as the demand for power battery rises, novel materials like mesocarbon microbeads (MCMB), lithium titanate (LTO), silicon carbon (Si/C), hard/soft carbon, and other anode materials see rapid growth in output.

In recent years, thanks to explosive growth of the Chinese new energy vehicle market, anode materials sales has burgeoned in China, significantly faster than the global average. China's anode materials sales reached 72,800 tons in 2015, a year-on-year surge of 42.7%, and are expected to record a CAGR of more than 30% over the next five years.

Global anode materials market is occupied mainly by Japanese and Chinese enterprises, with the former leading the way technologically, and the latter having advantage of low production cost because of rich graphite mineral resources in the country.

In 2015, global top6 anode materials companies (by sales volume) were BTR, Hitachi Chemical, Shanghai Shanshan, MitshubishiChem, Nippon Carbon, and JFE, together holding nearly 70% market share. Hitachi Chemical, Shanghai Shanshan, Nippon Carbon, and JFE focus on artificial graphite, and BTR and Hitachi Chemical specialize in natural graphite.

There had been more than 50 lithium battery anode materials producers in China by the end of 2015, mostly new entrants after 2010. The companies boasting anode materials capacity of over 10,000 tons included BTR (30,000t/a), Shanghai Shanshan Tech (15,000t/a), Jiangxi Zichen Technology (10,000t/a), and Hunan Shinzoom Technology (10,000t/a). As Chinese companies continue to boost anode materials capacity and improve technologies, the domestic market share of anode materials produced by local players will continue to rise over the next couple of years.

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Global and China Lithium Battery Anode Materials Industry Report, 2016-2020 by ResearchInChina highlights the followings:

- > Global lithium battery anode materials industry (market size and forecast, competitive pattern, development of new anode materials, etc.);
- > China's lithium battery anode materials industry (policies, market size & forecast, competitive pattern, price trend, etc.);
- Global and China's raw materials industry (graphite, silicon carbide, LTO, graphene) of anode materials (market size, competitive pattern, import & export, price trend, etc.);
- > Global and China's lithium battery industry (market size, competitive pattern, demand for anode materials and forecast, etc.);
- > 15 Global and Chinese anode materials producers (profile, anode materials business, operation, etc.);
- > 3 Global and Chinese lithium titanate producers (profile, lithium titanate business, operation, etc.).

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