

Research on China Li-ion Battery Market

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1. Introduction

In 2014-2015, China's Li-ion battery market has witnessed a rapid growth, especially in the alternative energy vehicle industry.

In 2015, the domestic output of power Li-ion battery increased to 15.7 GWh, while that in 2014 was less than 5 GWh. According to the *Planning for the Development of the Energy-Saving and Alternative Energy Vehicle Industry (2012-2020)* released by the State Council on 28 June, 2012, by 2020, the production capacity of battery electric vehicles and plug-in hybrid electric vehicles will reach 2 million units, with a CAGR of about 42.5% between 2015 and 2020. There will be a large growth room for China's Li-ion battery market in the future.

In order to find more opportunities in China's Li-ion battery market, CCM has done deep research on Li-ion battery's industrial chain extending from raw materials to application. From this report, you can not only know the industrial chain in China's Li-ion battery market, but also find investment opportunities through detailed analysis to the following aspects:

- ✓ Output of Li-ion battery in China, 2010-2015
- ✓ Geographic distribution of Li-ion battery in China by output, 2015
- ✓ Capacity and output of power Li-ion battery in China, 2013-2015
- ✓ Capacity distribution of power Li-ion battery in China by producer, 2015
- ✓ Supply and price of four major raw materials for Li-ion battery in China, 2011-2015
- ✓ Related policies and regulations for Li-ion battery industry in China, Nov. 2011-April 2016
- ✓ Market scale of China's Li-ion battery industry by end-use segment, 2014-2015
- ✓ Forecast on supply and demand of power Li-ion battery in China, 2016-2020
- ✓ Company profiles of major producers of Li-ion battery in China



2. Approach for the report

The report is drafted by diverse methods as follows:

✓ Desk research

The sources of desk research are various, including published magazines, journals, government statistics, industrial statistics, association seminars as well as information from the Internet. A lot of work has gone into compiling and analyzing the information obtained.

✓ Telephone interviews

To understand the domestic Li-ion battery market, CCM did telephone interviews with manufacturers, data suppliers, researchers, associations and governments. CCM obtained a lot of firsthand information that is beneficial to the report.

✓ Data processing and presentation

The data collected and compiled were sourced from:

- Published articles from periodicals, magazines and journals, the third database
- Statistics from governments and international institutes
- Telephone interviews with domestic producers, joint ventures, service suppliers, government
- Third-party data providers
- Comments from industrial experts
- CCM's database
- Professional database in other sources
- Information from the Internet

The data from various channels have been combined to make this report as precise and scientific as possible. Throughout the process, a series of internal discussions took place in order to analyze the data and draw conclusions from it.



3. Executive summary

China's Li-ion battery market has shown a rapid development especially in the past two years (2014-2015) because of the fast growth in the alternative energy vehicle industry.

Before 2014, the domestic output of power Li-ion battery was less than XXXX. In 2015, it increased to XXXX.

The total output of domestic Li-ion battery has XXXX from XXXX pieces in 2010 to XXXX pieces in 2015. And the top 3 production areas of Li-ion battery in China are the Pearl River Delta Region, the Changjiang River Delta Region, and the Beijing-Tianjin-Hebei Region.

Lithium hexafluorophosphate (LiPF₆) and lithium carbonate are the important raw materials of Li-ion battery in China. In 2015, the outputs of LiPF₆ and lithium carbonate were XXXX tonnes and XXXX tonnes, with operating rates of about XXXX and XXXX respectively.

The capacities and outputs of four key materials for Li-ion battery, cathode materials, anode materials, separators and electrolyte, were all keeping increasing in 2010-2015.

With the development of battery technology, Li-ion battery has been widely used in consumer electronics (mobile phone, computers, etc.), alternative energy vehicles and energy storage. Alternative energy vehicle has become the largest application field of Li-ion battery, accounting for XXXX of the total domestic consumption of Li-ion batteries, while that of consumer electronics has decreased to XXXX in 2015.

Based on the *Planning for the Development of the Energy-Saving and Alternative Energy Vehicle Industry (2012-2020)* released by the State Council on 28 June, 2012, by 2020, the production capacity of battery electric vehicles and plug-in hybrid electric vehicles will reach XXXX units, with a CAGR of about XXXX between 2015 and 2020. Owing to the XXX demand for alternative energy vehicles, the demand for power Li-ion battery will XXX accordingly.

4. What's in the report

China's Li-ion battery industry started in 1993. At that time, Li-ion battery industry was at the research phase and mainly studied by Chinese Academy of Sciences, University of Science and Technology Beijing and other research institutions. Till 1997, Li-ion battery started to be put into production in China. Meanwhile, the domestic producers emerged rapidly, such as BYD Company Limited, Shenzhen BAK Battery Co., Ltd. and Tianjin Lishen Battery Joint-Stock Co., Ltd. China's Li-ion battery industry has entered a stage of rapid development after 2000.

Entering into 2010, because of the rapid increase of consumer electronics, such as mobile phones and laptops, the domestic output of Li-ion battery increased sharply to XXXX billion pieces in 2012, with a YoY growth rate of XXXX.

According to the National Bureau of Statistics of the People's Republic of China, in 2014, the domestic output of Li-ion battery exceeded XXXX pieces for the first time, reaching XXXX pieces. And then it increased slightly to XXXXX pieces in 2015, up by XXXX YoY. Obviously, the growth in Li-ion battery output has slowed down.



Figure 1.2.1-1 Output of Li-ion battery in China, 2010-2015

Source: National Bureau of Statistics of China & CCM

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Figure 1.2.2-1 Geographic distribution of Li-ion battery in China by output, 2015



Source: CCM

Table 1.2.3-2 Capacity and output of major producers of power Li-ion battery in China, 2015 and 2016E

No.	Producer	Abbreviation	Capacity, GWh/a		Output, GWh
			2016E	2015	2015
1	BYD Company Limited	BYD	XXXX	XXXX	XXXX
2	XXXX	XXXX	XXXX	XXXX	XXXX
3	XXXX	XXXX	XXXX	XXXX	XXXX
4	XXXX	XXXX	XXXX	XXXX	XXXX
5	XXXX	XXXX	XXXX	XXXX	XXXX
6	XXXX	XXXX	XXXX	XXXX	XXXX
7	XXXX	XXXX	XXXX	XXXX	XXXX
8	XXXX	XXXX	XXXX	XXXX	XXXX
9	XXXX	XXXX	XXXX	XXXX	XXXX
10	XXXX	XXXX	XXXX	XXXX	XXXX

Source: CCM

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With the development of battery technology, Li-ion battery has been widely used in consumer electronics (mobile phones, computers, etc.), alternative energy vehicles and energy storage.

Before 2014, with the increase of smartphones and the popularity of laptops, the demand from consumer electronics for Li-ion battery was on a rising trend. In 2014, consumer electronics became the greatest application field, accounting for about XXXX of the total domestic

consumption of Li-ion batteries.

In 2015, the alternative energy vehicle industry became ...

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Figure 2.1-1 Market scale of China's Li-ion battery industry by end-use segment, 2014-2015



Source: CCM

If you want more information, please feel free to contact us

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