

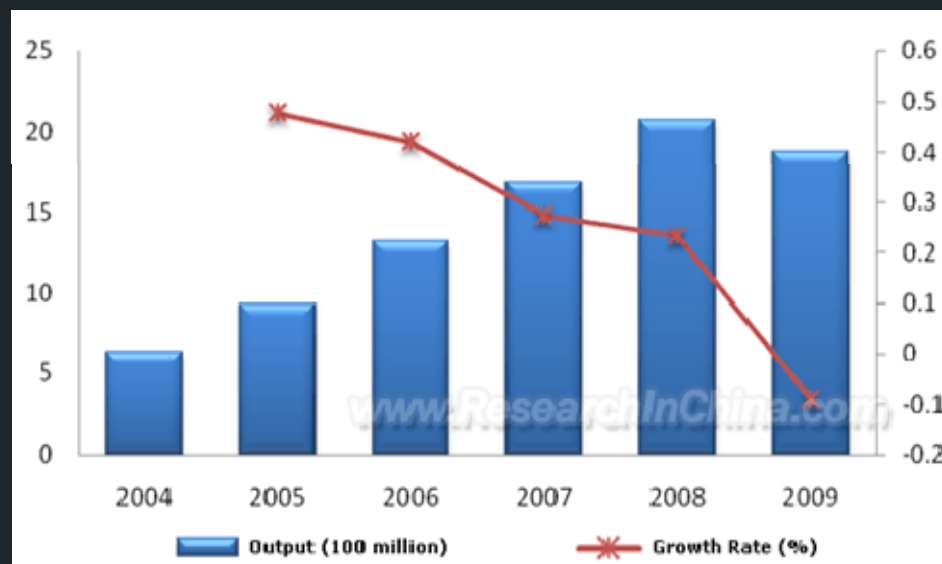
China Li-ion Battery and Its Raw Materials Industry Report, 2009-2010



At present, the global supply of Li-ion battery is monopolized by the three giants in East Asia, i.e. China, Japan and South Korea, with the total market share surpassing 95%.

In comparison with Japan's and South Korea's, China-made Li-ion batteries are mostly low-end products, featuring large quantity and meager profit. Whereas, it is generally developing towards the high-end from the low-end. In respect of application field, Chinese Li-ion battery manufacturers are not only seizing the market shares of Li-ion battery for 3G mobiles and laptops from Japanese and South Korean powers, but also actively developing the market of lithium battery for electric tools and E-bicycles.

Output and Growth Rate of Li-ion Battery in China, 2004-2009



Source: ResearchInChina

Regarding the market shares by sales volume of lithium battery manufacturers, Sanyo Energy, Sony, Samsung SDI and LGC altogether account for over 60% of the world's total. Chinese lithium battery enterprises have been developing rapidly in recent years, as BYD, BAK, ATL and Lishen all have ranked into the world's Top 10 in terms of sales volume, with a total global share of 20%.

The anode materials of Li-ion batteries mainly consist of LiCoO_2 , LiNiO_2 and LiMn_2O_4 ; wherein, LiCoO_2 is the first choice as anode material thanks to its outstanding performance. In China, the leading LiCoO_2 producers include Beijing Easpring Material Technology, Hunan Reshine New Material, MGL, Tianjin B&M Science and Technology Joint-Stock, Hunan Shanshan Advanced Materials, etc.

BTR is the constitutor of standards for cathode materials and the largest supplier of cathode materials in China. In 2009, BTR's sales volume (led by low-end products) totaled approximately 3,000 tons, taking nearly one-third share in the home market. Moreover, BTR has made much progress in the R&D of high-end products in recent years. As the second largest supplier of cathode materials in China, Shanshan Tech engages mainly the high-end products with a 40% domestic market share of high-end products, and its sales volume exceeded 2,000 tons in 2009.

Currently, only a few countries like Japan and the USA have control of the technologies on separator materials for Li-ion battery and can industrialize the technologies. China mainly imports separator materials to satisfy domestic Li-ion battery manufacturing.

Zhangjiagang Guotai-Huarong New Chemical Materials Co., Ltd holds 30% shares in the domestic electrolyte market, while others like Shantou Jinguang High-Tech, Tianjin Jinniu Power Sources Material and Guangzhou Tinci Materials Technology occupy 20% market shares in all. The remaining demand relies on the imports from abroad.

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