

Lithium-ion Battery Market: Trends, Opportunities and Competitive Analysis to 2030

https://marketpublishers.com/r/L1509DF02348EN.html

Date: April 2024 Pages: 150 Price: US\$ 4,850.00 (Single User License) ID: L1509DF02348EN

Abstracts

Get it in 2 to 4 weeks by ordering today

Lithium-Ion Battery Market Introduction

The global lithium-ion battery market has experienced remarkable growth in recent years, driven by the increasing demand for energy storage solutions in various sectors. Lithium-ion batteries have emerged as the preferred choice for portable electronic devices, electric vehicles (EVs), and renewable energy storage applications. This market report provides an in-depth analysis of the lithium-ion battery market, focusing on market share, key players, and emerging trends.

Lithium-Ion Battery Market Overview

The future of the global lithium-ion battery market looks promising with opportunities in the consumer electronics, transportation, industrial, and other markets. The global lithium-ion battery market is expected t%li%reach an estimated \$340.4 billion by 2030 with a CAGR of 17.9% from 2024 t%li%2030. The major drivers for this market are rapid growth in electric vehicle production, rising demand for Li-ion batteries in industrial and power storage applications, and decreasing price of Lithium-ion batteries.

The lithium-ion battery market has witnessed substantial growth. The rising adoption of EVs, coupled with the growing need for clean energy storage, has been the primary driver for the market's expansion. Lithium-ion batteries offer higher energy density, longer cycle life, and faster charging capabilities compared t%li%traditional battery technologies, making them highly attractive t%li%various industries.



A total of 107 figures / charts and 68 tables are provided in this 205-page report t%li%help in your business decisions. A sample figure with insights is shown below.

Emerging Trends in the Lithium-ion Battery Market

As the world transitions towards renewable energy sources, the need for efficient energy storage solutions becomes critical. Lithium-ion batteries are poised t%li%play a vital role in this transition, enabling the integration of intermittent renewable energy sources and enhancing grid stability. Ongoing research and development efforts are focused on improving the performance and safety of lithium-ion batteries. Innovations such as solid-state batteries, silicon anodes, and longer-lasting cathodes are expected t%li%drive the market's growth in the coming years.

The rising adoption of electric vehicles worldwide is a major catalyst for the lithium-ion battery market. Governments and industry players are investing heavily in charging infrastructure development t%li%support the growing EV fleet, further boosting the demand for lithium-ion batteries.

Emerging technology trends, which have a direct impact on the dynamics of the industry, include introduction of lithium air batteries, usage of silicon alloy anodes in lithium-ion batteries, and new generation lithium-ion batteries with new families of disruptive active materials.

Lithium-ion Battery Market by Segment

The lithium-ion battery market can be segmented based on application and end-use industry. By application, the market can be divided int%li%automotive, consumer electronics, industrial, and energy storage. The study includes a forecast for the global lithium-ion battery market by application, technology, and region as follows:

Lithium-ion Battery Market by Application [Value (\$B) shipment analysis for 2018 – 2030]:

Consumer Electronics

Transportation

Industrial



Others

Lithium-ion Battery Market by Technology [Value (\$B) shipment analysis for 2018 – 2030]:

Lithium Cobalt Oxide (LCO)

Lithium Nickel Manganese Cobalt (NMC)

Lithium Nickel Cobalt Aluminum Oxide (NCA)

Lithium Iron Phosphate (LFP)

Lithium Manganese Oxide (LMO) and Others

Lithium-ion Battery Market by Region [Value (\$B) shipment analysis for 2018 – 2030]:

North America

US

Canada

Mexico

Europe

Germany

The United Kingdom

France

Russia

Asia Pacific



China Japan India South Korea The Rest of the World Brazil Argentina

Lithium-Ion Battery Market Size and Share

The global lithium-ion battery market is experiencing significant growth, driven by the increasing demand for energy storage solutions across various industries. The market is dominated by a few key players wh%li%have established their market share through technological advancements and strategic partnerships. With emerging trends such as renewable energy storage, advancements in battery technology, and the rapid adoption of electric vehicles, the lithium-ion battery market is expected t%li%witness continued growth in the foreseeable future. Industry stakeholders need t%li%stay abreast of these trends and seize opportunities t%li%capitalize on the expanding market.

Lithium-Ion Battery Manufacturers

The market for lithium-ion batteries is dominated by a few key players, which together hold a significant market share. Companies such as CATL, BYD., Duracell, EnerSys have established their dominance in the market. These players have invested heavily in research and development t%li%enhance battery performance, reduce costs, and increase production capacity. Additionally, partnerships and collaborations with automotive manufacturers and energy storage companies have further strengthened their market position.

Companies in the market compete on the basis of product quality offered. Major players in this market focus on expanding their manufacturing facilities, R&D investments, infrastructural development, and leverage integration opportunities across the value



chain. With these strategies lithium-ion battery companies cater increasing demand, ensure competitive effectiveness, develop innovative products & technologies, reduce production costs, and expand their customer base. Some of the lithium-ion battery companies profiled in this report includes.

CATL BYD Duracell EnerSys GS Yuasa Johnson Controls LG Chem Panasonic Samsung SDI Toshiba

Lithium-ion Battery Market Insight

Lucintel forecasts that transportation will remain the largest end use segment and is als%li%expected t%li%witness the highest growth over the forecast period due t%li%due t%li%increasing production of electric vehicles globally

NMC lithium-ion battery technology will remain the largest segment and it is expected t%li%witness the highest growth over the forecast period due t%li%its excellent electrochemical performance and low resistance.



Asia Pacific is expected t%li%remain the largest region and witness the highest growth over the forecast period due t%li%increase in manufacturing of electric and hybrid vehicles and rise in sales of electronic products in the region.

Features of Lithium-ion Battery Market

Market Size Estimates: Lithium-ion battery market size estimation in terms of value (\$B)

Trend and Forecast Analysis: Market trends (2018-2023) and forecast (2024-2030) by various segments and regions.

Segmentation Analysis: Market size by application and technology

Regional Analysis: Lithium-ion battery market breakdown by North America, Europe, Asia Pacific, and the Rest of the World.

Growth Opportunities: Analysis of growth opportunities in different application, technology, and regions for the lithium-ion battery market.

Strategic Analysis: This includes M&A, new product development, and competitive landscape for the lithium-ion battery market.

Analysis of competitive intensity of the industry based on Porter's Five Forces model.

Frequently Asked Questions (FAQ)

Q1. How big is the lithium-ion battery market?

Answer: The global lithium-ion battery market is expected t%li%reach an estimated \$340.4 billion by 2030.

Q2. What is the growth forecast for lithium-ion battery market?



Answer: The lithium-ion battery market is expected t%li%grow at a CAGR of 17.9% from 2024 t%li%2030.

Q3. What are the major drivers influencing the growth of the lithium-ion battery market?

Answer: The major drivers for this market are rapid growth in electric vehicle production, rising demand for Li-ion batteries in industrial and power storage applications, and decreasing price of Lithium-ion batteries.

Q4. What are the major applications or end use industries for lithium-ion battery?

Answer: Transportation and consumer electronics are the major end use industries for lithium-ion battery.

Q5. What are the emerging trends in lithium-ion battery market?

Answer: Emerging technology trends, which have a direct impact on the dynamics of the industry, include lithium air batteries, usage of silicon alloy anodes in lithium-ion batteries, and new generation lithium-ion batteries with new families of disruptive active materials.

Q6. Wh%li%are the key lithium-ion battery companies?

Answer:Some of the key lithium-ion battery companies are as follows:

CATL BYD Duracell EnerSys GS Yuasa Johnson Controls LG Chem



Panasonic

Samsung SDI

Toshiba

Q7.Which lithium-ion battery product segment will be the largest in future?

Answer: Lucintel forecasts that NMC lithium-ion battery technology will remain the largest segment and it is expected t%li%witness the highest growth over the forecast period due t%li%its excellent electrochemical performance and low resistance.

Q8: In lithium-ion battery market, which region is expected t%li%be the largest in next 5 years?

Answer: Asia Pacific is expected t%li%remain the largest region and witness the highest growth over next 5 years

Q9. D%li%we receive customization in this report?

Answer:Yes, Lucintel provides 10% Customization Without any Additional Cost.

This report answers following 11 key questions

Q.1 What are some of the most promising potential, high growth opportunities for the global lithium-ion battery market by technology (LCO, NMC, NCA, LFP, LMO, and others), end use (consumer electronics, transportation, industrial, and others), and region (North America, Europe, Asia Pacific, and the Rest of the World)?

Q. 2 Which segments will grow at a faster pace and why?

Q.3 Which regions will grow at a faster pace and why?

Q.4 What are the key factors affecting market dynamics? What are the drivers and challenges of the market?

Q.5 What are the business risks and threats t%li%the market?



Q.6 What are the emerging trends in this market and the reasons behind them?

Q.7 What are the changing demands of customers in the market?

Q.8 What are the new developments in the market? Which companies are leading these developments?

Q.9 Wh%li%are the major players in this market? What strategic initiatives are being implemented by key players for business growth?

Q.10 What are some of the competitive products and processes in this area and how big of a threat d%li%they pose for loss of market share via material or product substitution?

Q.11 What M & A activities have taken place in the last 5 years in this market?

For any questions related t%li%lithium-ion battery market or related t%li%lithium-ion battery companies, lithium-ion battery market size, lithium-ion battery market share, lithium-ion battery analysis, write Lucintel analyst at email: helpdesk@lucintel.com we will be glad t%li%get back t%li%you soon.



Contents

1. EXECUTIVE SUMMARY

2. GLOBAL LITHIUM-ION BATTERY MARKET DYNAMICS

- 2.1: Introduction, Background, and Classifications
- 2.2: Supply Chain
- 2.3: Industry Drivers and Challenges

3. MARKET TRENDS AND FORECAST ANALYSIS FROM 2018 TO 2030

- 3.1: Macroeconomic Trends and Forecasts
- 3.2: Global Lithium-ion Battery Market Trends and Forecast
- 3.3 Global Lithium-ion Battery Market by Application
- 3.3.1: Consumer Electronics
- 3.3.2: Transportation
- 3.3.3: Industrial
- 3.3.4: Others
- 3.4: Global Lithium-ion Battery Market by Technology
 - 3.4.1: LCO
 - 3.4.2: NMC
 - 3.4.3: NCA
 - 3.4.4: LFP
 - 3.4.5: LMO and Others

4. MARKET TRENDS AND FORECAST ANALYSIS BY REGION

- 4.1: Global Lithium-ion Battery Market by Region
- 4.2: North American Lithium-ion Battery Market
- 4.2.1: Market by Application: Consumer Electronics, Transportation, Industrial, and Others
- 4.2.2: Market by Technology: LCO, NMC, NCA, LFP, LMO and Others
- 4.2.3: United States Lithium-ion Battery Market
- 4.2.4: Canadian Lithium-ion Battery Market
- 4.2.5: Mexican Lithium-ion Battery Market
- 4.3: European Lithium-ion Battery Market

4.3.1: Market by Application: Consumer Electronics, Transportation, Industrial, and Others



4.3.2: Market by Technology: LCO, NMC, NCA, LFP, LMO and Others

- 4.3.3: French Lithium-ion Battery Market
- 4.3.4: United Kingdom Lithium-ion Battery Market
- 4.3.5: German Lithium-ion Battery Market
- 4.3.6: Italian Lithium-ion Battery Market
- 4.4: APAC Lithium-ion Battery Market

4.4.1: Market by Application: Consumer Electronics, Transportation, Industrial, and Others

- 4.4.2: Market by Technology: LCO, NMC, NCA, LFP, LMO and Others
- 4.4.3: Chinese Lithium-ion Battery Market
- 4.4.4: South Korean Lithium-ion Battery Market
- 4.4.5: Indonesian Lithium-ion Battery Market
- 4.4.6: Japanese Lithium-ion Battery Market
- 4.4.7: Indian Lithium-ion Battery Market
- 4.5: ROW Lithium-ion Battery Market

4.5.1: Market by Application: Consumer Electronics, Transportation, Industrial, and Others

- 4.5.2: Market by Technology: LCO, NMC, NCA, LFP, LMO and Others
- 4.5.3: Brazilian Lithium-ion Battery Market
- 4.5.4: Argentina Lithium-ion Battery Market

5. COMPETITOR ANALYSIS

- 5.1: Product Portfolio Analysis
- 5.2: Market Share Analysis
- 5.3: Operational Integration
- 5.4: Geographical Reach
- 5.5: Porter's Five Forces Analysis

6. GROWTH OPPORTUNITIES AND STRATEGIC ANALYSIS

- 6.1: Growth Opportunity Analysis
 - 6.1.1: Growth Opportunities for the Global Lithium-ion Battery Market by Application
 - 6.1.2: Growth Opportunities for the Global Lithium-ion Battery Market by Technology
- 6.1.3: Growth Opportunities for the Global Lithium-ion Battery Market by Region
- 6.2: Emerging Trends in the Global Lithium-ion Battery Market
- 6.3: Strategic Analysis
- 6.3.1: New Product Development
- 6.3.2: Mergers and Acquisitions



7. COMPANY PROFILES OF LEADING PLAYERS

- 7.1: CATL
- 7.2: BYD
- 7.3: Duracell
- 7.4: EnerSys
- 7.5: GS Yuasa
- 7.6: Johnson Controls
- 7.7: LG Chem
- 7.8: Panasonic Corporation
- 7.9: Samsung SDI
- 7.10: Toshiba Corporation



I would like to order

- Product name: Lithium-ion Battery Market: Trends, Opportunities and Competitive Analysis to 2030 Product link: <u>https://marketpublishers.com/r/L1509DF02348EN.html</u>
 - Price: US\$ 4,850.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/L1509DF02348EN.html</u>