

Lithium Ion Battery Cathodes: -- Markets Reach \$58.8 Billion by 2024

LEXINGTON, Massachusetts (January 18, 2019) – WinterGreen Research announces that it has published a new study *Lithium Ion Battery Cathode Markets: Market Shares, Strategy, and Forecasts, worldwide, 2019 to 2024*. The 2019 study has 250 pages, 119 tables and figures. Worldwide markets are poised to achieve continuing growth as the advantages brought by using new materials are used to decrease the cost of producing lithium ion batteries. The customization achieved by reducing the quantity of cobalt proportionally inside the cathode is a significant market growth driver.

Lithium-ion Batteries at \$100/kWh Make EVs Cheaper Than Traditional Gas-Powered Vehicles. As the new cathode technologies are applied to lithium ion batteries, the cost of lithium ion batteries will continue to decrease. Lithium-ion batteries aim to cost \$100/kWh, – a cost that makes EVs cheaper than traditional gas-powered vehicles. Companies are targeting between \$80/kWh and \$100/kWh. Realistically companies will likely approach \$100/kWh.

NMC lithium battery cathode materials are used for electric vehicles. As the cathode markets develop toward NMC, it is clear the LFP favored by Chinese manufacturers, not suitable for electric vehicles will lose market share. Current NMC ternary lithium-ion batteries from South Korean and Japanese makers typically employ a ratio of 60% nickel to 20% manganese, and 20% cobalt (6:2:2), but as that ratio moves to 8:1:1 in 2018 and beyond, the cathode is a key element in achieve vast cost efficiencies.

On the basis of product, the market is primarily split into
Cobalt

Manganese

Nickel Cobalt Manganese (NMC)

Lithium Iron Phosphate (LFP)



Copyright 2018 WinterGreen Research, Inc.

-Page 1-

WinterGreen Research, Inc.

6 Raymond St.

Lexington, MA 02421

(781) 863-5078

www.wintergreenresearch.com

Worldwide Lithium Ion Battery cathodes have many applications. On the basis on the end users/application, this report covers

Electric Vehicles
Drones, UAV, UUV
Power Tools
Smart Phone Equipment
Consumer Electronics Products
Other

Worldwide Lithium Ion Battery cathode market at \$7 billion market in 2018, is expected to reach \$58.8 billion by 2024.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, Research and Markets, and Report Linker.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

Contact:

Susan Eustis, President and Co-Author

(781) 863-5078 (Work)



Copyright 2018 WinterGreen Research, Inc.

-Page 2-

WinterGreen Research, Inc.

6 Raymond St.

Lexington, MA 02421

(781) 863-5078

www.wintergreenresearch.com

WinterGreen Research
6 Raymond St.
Lexington, MA 02421

(617) 852-7876 (Cell)
susan@wintergreenresearch.com
www.wintergreenresearch.com

Key Words: Cathode, Cobalt, Lithium Ion Battery, EV, Electric Vehicle, Electric Vehicles, Drones, UAV, UUV, Power Tools, Smart Phone Equipment, Consumer Electronics, Manganese, Nickel Cobalt Manganese (NMC), NMC 811, NMC 632, Lithium Iron Phosphate (LFP Manganese, Nickel Cobalt Aluminum (NMA)



Copyright 2018 WinterGreen Research, Inc.

-Page 3-

WinterGreen Research, Inc.
6 Raymond St.
Lexington, MA 02421
(781) 863-5078
www.wintergreenresearch.com