

# **Li-ion Battery Recycling Market by Model (Contractual Services (Source, End-use Industry), Direct-to-Market), Battery Type (LCO, LFP, LMO, NCA, NMC, LTO), Process (Pyrometallurgical, Hydrometallurgical), and Geography - Global Forecast to 2030**

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## **Abstracts**

Li-ion Battery Recycling Market by Model (Contractual Services (Source, End-use Industry), Direct-to-Market), Battery Type (LCO, LFP, LMO, NCA, NMC, LTO), Process (Pyrometallurgical, Hydrometallurgical), and Geography - Global Forecast to 2030

The research report titled, 'Li-ion Battery Recycling Market by Model (Contractual Services (Source, End-use Industry), Direct-to-Market), Battery Type (LCO, LFP, LMO, NCA, NMC, LTO), Process (Pyrometallurgical, Hydrometallurgical), and Geography - Global Forecast to 2030,' provides in-depth analysis of Li-ion battery recycling Market across five major geographies and emphasizes on the current market trends, market sizes, market shares, recent developments, and forecasts till 2030.

The global Li-ion battery recycling market is expected to reach \$6.9 billion by 2030, at a CAGR of 21.3% during the forecast period of 2023–2030.

The growth of this market is attributed to the factors such as the surge in need to manage the disposal of used batteries, the growing demand for electric vehicles, and the declining prices of batteries. However, the lack of proper recycling infrastructure restrains the growth of the global Li-ion recycling market. Growing government incentives for battery recycling and the rising recovery of valuable materials are expected to create growth opportunities for the players operating in this market.

However, the high cost of Li-ion recycling is a major challenge for the growth of the Li-ion battery recycling market.

Based on business model, the global Li-ion battery recycling market is broadly segmented into contractual services and direct-to-market. In 2023, the contractual services segment is expected to account for the larger share of the global Li-ion battery recycling market. This segment's large market share is attributed to the surging need to manage the disposal of used batteries, increasing government incentives and regulatory compliance for Li-ion battery recycling, rising need to reduce the cost of raw materials for new EV batteries. This segment is also projected to register the higher CAGR during the forecast period.

Based on battery type, the global Li-ion battery recycling market is broadly segmented into lithium cobalt oxide (LCO), lithium iron phosphate (LFP), lithium manganese oxide (LMO), lithium nickel cobalt aluminum oxide (NCA), lithium nickel manganese cobalt oxide (NMC), and lithium titanate oxide (LTO). In 2023, the LCO is expected to account for the largest share of the global Li-ion battery recycling market. This segment's large market share is attributed to its several advantages over other types of lithium-ion batteries, including high power output, increasing use in applications such as global positioning system devices, tablets, laptop computers, smartphones, electric vehicles, and medical devices where high-power output and long cycle life are essential, LCO batteries limited lifespan, rising need to recover valuable materials from the Li-ion batteries. However, the NMC segment is projected to register the highest CAGR during the forecast period.

Based on geography, the global Li-ion battery recycling market is segmented into North America, Europe, Asia-Pacific, Latin America, and the Middle East & Africa. In 2023, Asia-Pacific is expected to account for the largest share of the global Li-ion battery recycling market, followed by Europe and North America. The region is also expected to witness rapid growth during the forecast period. The large market share of Asia-Pacific is attributed to the growing implementation of new policies and regulations to promote the recycling of lithium-ion batteries and reduce environmental pollution, the growing demand for lithium-ion batteries for EVs battery production, the surging amount of battery waste generated, and the growing awareness and concern for environmental sustainability.

The key players operating in the global Li-ion battery recycling market are Duesenfeld GmbH (Germany), RecycLiCo Battery Materials Inc. (Canada), Cirba Solutions (U.S.), Accurec-Recycling GmbH (Germany), Li-Cycle Holdings Corp. (Canada), Redux

Recycling GmbH (U.S.), Redwood Materials, Inc. (U.S.), Glencore plc (Switzerland), Fortum Corporation (Finland), Trishulavel Eshan Pvt Ltd (Li-Circle) (India), SNAM S.A.S (A subsidiary of Floridienne S.A) (France), Primobius GmbH (Germany), MTB Recycling (France), Tata Chemicals Limited (India), OnTo Technology (U.S.), American Battery Technology Company (U.S.), Attero Recycling Pvt. Ltd. (India), Umicore SA (Belgium), and Lithion Recycling Inc. (Canada).

Key questions answered in the report:

Which are the high growth market segments in terms of business model, battery type, recycling process, and geography?

What is the historical market for Li-ion battery recycling market across the globe?

What are the market forecasts and estimates from 2023–2030?

What are the major drivers, restraints, and opportunities in the global Li-ion battery recycling market?

Who are the major players in the global Li-ion battery recycling market, and what shares of the market do they hold?

Who are the major players in various countries, and what shares of the market do they hold?

How is the competitive landscape?

What are the recent developments in the global Li-ion battery recycling market?

What are the different strategies adopted by the major players in the global Li-ion battery recycling market?

What are the geographical trends and high growth countries?

Who are the local emerging players in the global Li-ion battery recycling market and how do they compete with the other players?

Scope of the report:

Li-ion Battery Recycling Market, by Business Model

Contractual Recycling Services

Contractual Recycling Services, By Source

Lithium-ion Cell Manufacturing Waste

Electronic Portable Devices

Electric Vehicles

Energy Storage Systems

Other Sources

Contractual Recycling Services, By End-use Industry

Consumer Electronics

Automotive

Industrial

Power & Utility

Other Industries

Direct-to-Market

Direct-to-Market, By Source

Lithium-ion Cell Manufacturing Waste

Electronic Portable Devices

Electric Vehicles

Energy Storage Systems

Other Sources

Direct-to-Market, By End-use Industry

Consumer Electronics

Automotive

Industrial

Power & Utility

Other Industries

Direct-to-Market, By Material

Graphite

Nickel

Cobalt

Copper

Manganese

Lithium

Aluminum

Iron

Other Materials

Li-ion Battery Recycling Market, by Battery Type

*Li-ion Battery Recycling Market by Model (Contractual Services (Source, End-use Industry), Direct-to-Market),...*

Lithium Cobalt Oxide (LCO)

Lithium Iron Phosphate (LFP)

Lithium Manganese Oxide (LMO)

Lithium Nickel Cobalt Aluminum Oxide (NCA)

Lithium Nickel Manganese Cobalt Oxide (NMC)

Lithium Titanate Oxide (LTO)

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Pyrometallurgical Process

Hydrometallurgical Process

Other Recycling Processes

#### Li-ion Battery Recycling Market, by Geography

North America

North America

U.S.

Canada

Europe

Germany

U.K.

France

Italy

Spain

Switzerland

Belgium

Norway

Poland

Finland

Rest of Europe

Asia-Pacific

Japan

China

India

South Korea

Singapore

Australia & New Zealand

Malaysia

Rest of Asia-Pacific

Latin America

Brazil

Mexico

Rest of Latin America

Middle East & Africa

UAE

Saudi Arabia

Rest of the Middle East & Africa



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