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Black Mass Recycling Market by Battery Type (Lithium-Ion, Nickel), Battery Source (Automotive, Consumer Electronics, Power, Marine), Recycling Process (Pyro, Hydro), Recovered Metal (Nickel, Cobalt, Lithium, Copper), & Region - Global Forecast to 2032

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Abstracts

The global black mass recycling market is projected to grow from USD 14.41 billion in 2024 to USD 51.70 billion by 2032, at a CAGR of 17.3% during the forecast period. The industry for recycling black mass is expanding significantly due to surge in automotive, consumer electronics, and other sectors. Demand for portable devices and electric vehicles is growing, compounded by the scarcity and increasing prices of critical battery materials. Critical is the need to introduce a more efficient recycling solution. Meanwhile, consumers and manufacturers alike are being driven harder by increasingly stringent environment regulations and growing awareness among consumers on sustainability issues, making them look more enthusiastically towards battery recycling as a better way forward for environmentally responsible end-of-life batteries management.

“Nickel-based battery segment, by battery type, is estimated to account for the second largest share during the forecast period.”

The nickel-based battery segment is projected to secure the second-largest share in the forecast period. This mainly attributes to the fact that such batteries are widely applied in industrial usage, power tools, and hybrid vehicles. The increasing market for energy storage and electric mobility has, therefore, immensely fueled nickel-based battery recycling, as the extracted metal nickel is highly valued and essential for battery manufacturing. Recovery of this key metal from black mass is a must to solve raw material shortages and facilitate more sustainability through the transition toward more

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sustainable battery supply chains.

“By battery source, consumer electronics segment accounted for the second largest share during the forecast period.”

The consumer electronics segment by battery source is expected to have the second-largest share of the black mass recycling market. primarily fuelled by continuous surges in consumer devices like smartphones, tablets, and smartwatches. With the latter gaining wider acceptance, spent batteries are piling up at volumes that increasingly constitute a need for recycling to recover valuable metals such as lithium and cobalt. The momentum for sustainability and reducing e-waste will only create further growth in importance, thereby positioning consumer electronics battery recycling as an important segment within the circular economy for battery materials.

“Europe region is estimated to account for the second largest share during the forecast period.”

Europe is likely to take the second-biggest share, primarily on account of a few significant factors. This includes the leadership of the region in embracing electric vehicles and renewable energy, thereby increasing volumes of end-of-life batteries, and the fact that this region has very stringent environmental regulations and a strong focus on the circular economy, which have boosted investments in recycling infrastructure. The ready domestic demand for these materials recycled is created by the European automotive and battery manufacturing companies.

Profile break-up of primary participants for the report:

By Company Type: Tier 1 – 65%, Tier 2 – 20%, and Tier 3 – 15%

By Designation: Directors– 30%, Managers– 25%, and Others – 45%

By Region: North America – 20%, Europe – 25%, and Asia Pacific – 55%

Contemporary Amperex Technology Co., Limited (China), Cirba Solutions (US), Glencore (Switzerland), Recyclico Battery Materials Inc. (Canada), and Umicore (Belgium) are some of the major players operating in the black mass recycling market. These players have adopted strategies such as acquisitions, expansions, product launches, and partnerships to increase their market share business revenue.

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Research Coverage:

The report defines, segments, and projects the black mass recycling market based on battery type, battery source, recycling process, recovered metal, and region. It provides detailed information regarding the major factors influencing the growth of the market, such as drivers, restraints, opportunities, and challenges. It strategically profiles, black mass recycling manufacturers and comprehensively analyses their market shares and core competencies as well as tracks and analyzes competitive developments, such as expansions, agreements, product launches, and acquisitions, undertaken by them in the market.

Reasons to Buy the Report:

The report is expected to help the market leaders/new entrants in the market by providing them the closest approximations of revenue numbers of the black mass recycling market and its segments. This report is also expected to help stakeholders obtain an improved understanding of the competitive landscape of the market, gain insights to improve the position of their businesses, and make suitable go-to-market strategies. It also enables stakeholders to understand the pulse of the market and provide them information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Increasing demand for electric vehicles, Stringent local and state government regulations and EPA guidelines, Rising demand for recycled products and materials, Depletion of earth metals), restraints (Safety issues related to storage and transportation of spent batteries), opportunities (Subsidies to encourage battery recycling, Rising adoption of lithium-ion batteries due to declining prices), and challenges (High cost of recycling and dearth of technologies) influencing the growth of the black mass recycling market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities in the black mass recycling market.

Market Development: Comprehensive information about lucrative markets – the report analyses the black mass recycling market across varied regions.

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Market Diversification: Exhaustive information about new products, various types, untapped geographies, recent developments, and investments in the black mass recycling market.

Competitive Assessment: In-depth assessment of market shares, growth strategies and product offerings of leading players such as Contemporary Amperex Technology Co., Limited (China), Cirba Solutions (US), Glencore (Switzerland), Recyclico Battery Materials Inc. (Canada), and Umicore (Belgium), and others in the black mass recycling market.

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