

Graphene Battery Market by Type (Lithium-Ion Graphene Battery, Lithium-Sulfur Graphene Battery, Graphene Supercapacitor), End-Use Industry (Consumer Electronics, Automotive, Industrial, Power), Region - Global Forecast to 2030

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Abstracts

“The global graphene battery market is projected to grow at a CAGR of 23.9% from 2024 to 2030, in terms of value.”

The global graphene battery market size is projected to grow from USD 168 million in 2024 to USD 609 million by 2030, at a CAGR of 23.9% from 2024 to 2030. The increasing demand for graphene batteries in consumer electronics and automotive industries is expected to drive the graphene battery industry.

“The lithium-ion graphene battery type segment is projected to grow at the highest CAGR during the forecast period.”

Based on type, the lithium-ion graphene battery segment is projected to grow at the highest CAGR during the forecast period. The demand for graphene lithium-ion batteries is expected to increase from various end-use industries, such as consumer electronics, automotive, industrial, and power, among others due, due to their lightweight, durability and suitability for high capacity energy storage, as well as short charging cycles. This is expected to result in the lithium-ion graphene battery segment exhibiting the highest growth rate.

“The automotive end-use industry segment is projected to grow at the highest CAGR during the forecast period.”

Based on the end-use industry, the battery-grade segment is projected to grow at the highest CAGR during the forecast period. The need for high power and energy density has created a demand for reliable and safe batteries for industries such as automotive and consumer electronics, ultimately driving the growth of the graphene battery market. The automotive segment is forecasted to show the highest growth rate owing to the rise in the demand for electric vehicles due to environmental concerns and awareness about clean and sustainable fuel.

“Asia Pacific is projected to grow the highest CAGR in the graphene battery market during the forecast period.”

Asia Pacific is projected to grow at the highest CAGR in the graphene battery industry from 2024 to 2030. The growing economies of the countries such as China, Japan, Thailand, Taiwan, Malaysia, among others, coupled with the expansion and development of the manufacturing sector is expected to play a vital role in driving the demand for various products including batteries. Apart from electronic gadgets, the graphene battery is also used in electric vehicles and the demand for electric vehicles is increasing in the Asia Pacific region.

Profile break-up of primary participants for the report:

By Company Type: Tier 1 – 45%, Tier 2 – 22%, and Tier 3 – 33%

By Designation: C-level Executives – 50%, Directors – 10%, and Others – 40%

By Region: North America – 33%, Europe – 22%, Asia Pacific – 38%, South America – 5%, Middle East & Africa- 2%

Furthermore, as a part of the qualitative analysis of the graphene battery market, the research provides a comprehensive review of drivers, restraints, opportunities, and challenges influencing the growth of the market across the globe. It also discusses competitive strategies adopted by the leading market players such as Samsung SDI (South Korea), Huawei Technologies Co., Ltd. (China), Log 9 Materials Scientific Private Limited (India), Cabot Corporation (US), Grabat Graphenano Energy (Spain), Nanotech Energy (US), Nanotek Instruments, Inc. (US), XG Sciences, Inc. (US), ZEN Graphene Solutions Ltd. (Canada), Graphene NanoChem (Malaysia), Global Graphene Group (US), Vorbeck Materials Corp. (US), Graphenea Group (Spain), Hybrid Kinetic Group Ltd. (Hong Kong) and Targray Group (Canada).

Research Coverage:

The report defines, segments, and projects the size of the graphene battery market based on type, end-use industry, grade, and region. It strategically profiles the key players and comprehensively analyzes their market share and core competencies. It also tracks and analyzes competitive developments, such as expansions, and joint-ventures undertaken by them in the market.

Reasons to Buy the Report:

This report is expected to help the market leaders/new entrants in the market by providing them the closest approximations of revenue numbers of the graphene battery market and its segments. The 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.

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*Details on Business Overview, Products Offered, Recent Developments, SWOT Analysis, MnM View might not be captured in case of unlisted companies.

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