

Graphite Market Forecasts to 2030 – Global Analysis by Type (Natural Graphite and Synthetic Graphite), Form (Powder, Granules, Blocks and Other Forms), Application, End User and By Geography

<https://marketpublishers.com/r/G44DDFD62776EN.html>

Date: April 2025

Pages: 150

Price: US\$ 4,150.00 (Single User License)

ID: G44DDFD62776EN

Abstracts

According to Statistics MRC, the Global Graphite Market is accounted for \$7.8 billion in 2024 and is expected to reach \$13.009 billion by 2030 growing at a CAGR of 8.9% during the forecast period. Graphite is a naturally occurring form of crystalline carbon known for its high conductivity, lubricity, and heat resistance. It exists in both natural and synthetic forms, with natural graphite mined from deposits and synthetic graphite produced from carbon-rich materials. Graphite is widely used in lithium-ion batteries as an anode material, in steelmaking for electric arc furnace electrodes, and in refractories for high-temperature applications. It also serves as a lubricant, a component in brake linings, and a thermal management material in electronics.

According to the International Energy Agency (IEA), the number of electric vehicles on the road is expected to reach 145 million by 2030, up from 11 million in 2020.

Market Dynamics:

Driver:

Rising Demand for Lithium-Ion Batteries

The increasing demand for lithium-ion batteries is considerably driving the graphite market, as graphite is the major material used in battery anodes. The need for high-purity graphite is only increasing due to the quick growth of consumer electronics, renewable energy storage, and electric vehicles (EVs). Graphite mining, refinement,

and synthetic graphite production are being driven by this increase in demand. Governments and businesses are also investing in battery supply chains, which increases the need for graphite and promotes research into cutting-edge battery technologies and environmentally friendly graphite sourcing.

Restraint:

Environmental Concerns and Regulations

Environmental issues and tight restrictions impede the graphite market by raising manufacturing costs, limiting resource extraction, and regulating supply chain operations. Mining and processing are impacted by stricter emission standards and sustainability requirements, which result in operational delays and lower profitability. Further impeding industry expansion and competition are governmental restrictions on carbon emissions and trash disposal, which limits market expansion.

Opportunity:

Advancements in Graphene Technology

Advances in graphene technology are propelling the market by increasing demand for high-purity graphite, a critical raw material in graphene synthesis. Innovations in electronics, energy storage, composites, and coatings are being fueled by graphene's exceptional strength, conductivity, and lightweight characteristics. High-quality graphite is becoming more and more necessary as businesses use graphene for high-performance materials, flexible screens, and supercapacitors. In order to fulfill the increasing market demand, investments in mining, refining, and synthetic manufacture are encouraged, which raises the value of graphite.

Threat:

Supply Chain Constraints

Supply chain constraints in the graphite industry stifle growth by resulting in raw material shortages, production delays, and higher costs. The availability of graphite is impacted by mining, transportation, and processing disruptions, which have an effect on sectors like electronics, steel, and EV batteries. Supply problems are made worse by export restrictions and geopolitical instability. These limitations affect market stability and long-term planning by causing price volatility and compelling businesses to look for

alternate sources.

Covid-19 Impact

The COVID-19 pandemic disrupted the graphite market in the Asia-Pacific region by causing supply chain bottlenecks, reduced mining activities, and declining industrial demand. Lockdowns impacted EV production and steel manufacturing, key graphite-consuming sectors. However, post-pandemic recovery, increasing demand for lithium-ion batteries, and government initiatives for clean energy boosted market growth, stabilizing supply chains and driving renewed investments in graphite production and processing.

The Lubricants segment is expected to be the largest during the forecast period

The Lubricants segment is expected to account for the largest market share during the forecast period, due to graphite's excellent lubricity, thermal stability, and resistance to extreme pressures. Graphite-based lubricants are widely used in industrial machinery, automotive applications, and high-temperature environments where conventional oils fail. The growing demand for dry and solid lubricants, especially in metalworking, mining, and aerospace, boosts graphite consumption. Additionally, advancements in environmentally friendly lubricants further propel demand, thereby supporting market growth.

The metallurgy segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the metallurgy segment is predicted to witness the highest growth rate, as graphite electrodes are essential in electric arc furnaces (EAFs) for high-temperature steel production, increasing demand as the steel industry shifts toward electric-based processes. Additionally, graphite's heat resistance and lubricating properties make it crucial in refractories, molds, and crucibles. With growing industrialization and infrastructure development, the need for high-quality steel and alloys continues to rise, further boosting the demand for graphite in metallurgy.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share because of the growing need for lithium-ion batteries in energy storage systems. The need for graphite electrodes in electric arc furnaces is also fueled by the

region's growing steel sector. Furthermore, government programs promoting sustainable energy and homegrown graphite production lessen dependency on imports. Market expansion is further aided by developments in graphene-based applications. The market for graphite in high-tech and industrial applications in North America is expected to grow steadily due to rising investments in sustainable technology.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, owing to demand from the electric vehicle (EV) industry. Rapid industrialization, urbanization, and the growing steel sector further boost demand, as graphite is essential in refractories and foundries. China, a dominant producer, influences global supply dynamics, while rising investments in advanced battery technologies enhance market growth. Additionally, government initiatives promoting renewable energy and energy storage solutions contribute to the expanding graphite industry.

Key players in the market

Some of the key players profiled in the Graphite Market include AMG, Focus Graphite, GrafTech International Ltd., Graphite India Limited, HEG Limited, Mason Resources Inc., Mersen Group, Mitsubishi Chemical Group Corporation., NextSource Materials, Nippon Carbon Co Ltd., Northern Graphite Corp., Nouveau Monde Graphite, NOVONIX Limited, Resonac Holdings Corporation, SGL Carbon, Syrah Resources Limited, Talga Group, Tokai Carbon Co., Ltd., Toyo Tanso Co., Ltd. and Triton Mineral Limited.

Key Developments:

In July 2024, Neste and Mitsubishi Corporation have agreed to establish a strategic partnership focusing on developing value chains for renewable chemicals and plastics for and with Japanese brands.

In June 2024, Technip Energies and Mitsubishi Chemical Corporation, announced that they are licensing an improved OXO alcohol technology, named 'OXO M-Process'. OXO alcohols are used as solvents in chemical manufacturing.

In April 2022, Origin Materials, Inc., and Mitsubishi Chemical Holdings Group (MCHG), announced a partnership to develop advanced chemicals and materials built on Origin Materials' patented technology platform.

Types Covered:

Natural Graphite

Synthetic Graphite

Forms Covered:

Powder

Granules

Blocks

Other Forms

Applications Covered:

Refractories

Batteries

Foundry

Lubricants

Electrodes

Composites & Polymers

Other Applications

End Users Covered:

Metallurgy

Automotive & Transportation

Electronics & Electricals

Aerospace & Defense

Construction

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2022, 2023, 2024, 2026, and 2030

- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Application Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL GRAPHITE MARKET, BY TYPE

- 5.1 Introduction
- 5.2 Natural Graphite
 - 5.2.1 Flake Graphite
 - 5.2.2 Amorphous Graphite
 - 5.2.3 Vein (Lump) Graphite
- 5.3 Synthetic Graphite
 - 5.3.1 Graphite Electrode
 - 5.3.2 Carbon Fiber
 - 5.3.3 Graphite Blocks

6 GLOBAL GRAPHITE MARKET, BY FORM

- 6.1 Introduction
- 6.2 Powder
- 6.3 Granules
- 6.4 Blocks
- 6.5 Other Forms

7 GLOBAL GRAPHITE MARKET, BY APPLICATION

- 7.1 Introduction
- 7.2 Refractories
- 7.3 Batteries
- 7.4 Foundry
- 7.5 Lubricants
- 7.6 Electrodes
- 7.7 Composites & Polymers
- 7.8 Other Applications

8 GLOBAL GRAPHITE MARKET, BY END USER

- 8.1 Introduction
- 8.2 Metallurgy
- 8.3 Automotive & Transportation
- 8.4 Electronics & Electricals
- 8.5 Aerospace & Defense
- 8.6 Construction

8.7 Other End Users

9 GLOBAL GRAPHITE MARKET, BY GEOGRAPHY

9.1 Introduction

9.2 North America

9.2.1 US

9.2.2 Canada

9.2.3 Mexico

9.3 Europe

9.3.1 Germany

9.3.2 UK

9.3.3 Italy

9.3.4 France

9.3.5 Spain

9.3.6 Rest of Europe

9.4 Asia Pacific

9.4.1 Japan

9.4.2 China

9.4.3 India

9.4.4 Australia

9.4.5 New Zealand

9.4.6 South Korea

9.4.7 Rest of Asia Pacific

9.5 South America

9.5.1 Argentina

9.5.2 Brazil

9.5.3 Chile

9.5.4 Rest of South America

9.6 Middle East & Africa

9.6.1 Saudi Arabia

9.6.2 UAE

9.6.3 Qatar

9.6.4 South Africa

9.6.5 Rest of Middle East & Africa

10 KEY DEVELOPMENTS

10.1 Agreements, Partnerships, Collaborations and Joint Ventures

- 10.2 Acquisitions & Mergers
- 10.3 New Product Launch
- 10.4 Expansions
- 10.5 Other Key Strategies

11 COMPANY PROFILING

- 11.1 AMG
- 11.2 Focus Graphite
- 11.3 GrafTech International Ltd.
- 11.4 Graphite India Limited
- 11.5 HEG Limited
- 11.6 Mason Resources Inc.
- 11.7 Mersen Group
- 11.8 Mitsubishi Chemical Group Corporation.
- 11.9 NextSource Materials
- 11.10 Nippon Carbon Co Ltd.
- 11.11 Northern Graphite Corp.
- 11.12 Nouveau Monde Graphite
- 11.13 NOVONIX Limited
- 11.14 Resonac Holdings Corporation
- 11.15 SGL Carbon
- 11.16 Syrah Resources Limited
- 11.17 Talga Group
- 11.18 Tokai Carbon Co., Ltd.
- 11.19 Toyo Tanso Co., Ltd.
- 11.20 Triton Mineral Limited

List Of Tables

LIST OF TABLES

- Table 1 Global Graphite Market Outlook, By Region (2022-2030) (\$MN)
- Table 2 Global Graphite Market Outlook, By Type (2022-2030) (\$MN)
- Table 3 Global Graphite Market Outlook, By Natural Graphite (2022-2030) (\$MN)
- Table 4 Global Graphite Market Outlook, By Flake Graphite (2022-2030) (\$MN)
- Table 5 Global Graphite Market Outlook, By Amorphous Graphite (2022-2030) (\$MN)
- Table 6 Global Graphite Market Outlook, By Vein (Lump) Graphite (2022-2030) (\$MN)
- Table 7 Global Graphite Market Outlook, By Synthetic Graphite (2022-2030) (\$MN)
- Table 8 Global Graphite Market Outlook, By Graphite Electrode (2022-2030) (\$MN)
- Table 9 Global Graphite Market Outlook, By Carbon Fiber (2022-2030) (\$MN)
- Table 10 Global Graphite Market Outlook, By Graphite Blocks (2022-2030) (\$MN)
- Table 11 Global Graphite Market Outlook, By Form (2022-2030) (\$MN)
- Table 12 Global Graphite Market Outlook, By Powder (2022-2030) (\$MN)
- Table 13 Global Graphite Market Outlook, By Granules (2022-2030) (\$MN)
- Table 14 Global Graphite Market Outlook, By Blocks (2022-2030) (\$MN)
- Table 15 Global Graphite Market Outlook, By Other Forms (2022-2030) (\$MN)
- Table 16 Global Graphite Market Outlook, By Application (2022-2030) (\$MN)
- Table 17 Global Graphite Market Outlook, By Refractories (2022-2030) (\$MN)
- Table 18 Global Graphite Market Outlook, By Batteries (2022-2030) (\$MN)
- Table 19 Global Graphite Market Outlook, By Foundry (2022-2030) (\$MN)
- Table 20 Global Graphite Market Outlook, By Lubricants (2022-2030) (\$MN)
- Table 21 Global Graphite Market Outlook, By Electrodes (2022-2030) (\$MN)
- Table 22 Global Graphite Market Outlook, By Composites & Polymers (2022-2030) (\$MN)
- Table 23 Global Graphite Market Outlook, By Other Applications (2022-2030) (\$MN)
- Table 24 Global Graphite Market Outlook, By End User (2022-2030) (\$MN)
- Table 25 Global Graphite Market Outlook, By Metallurgy (2022-2030) (\$MN)
- Table 26 Global Graphite Market Outlook, By Automotive & Transportation (2022-2030) (\$MN)
- Table 27 Global Graphite Market Outlook, By Electronics & Electricals (2022-2030) (\$MN)
- Table 28 Global Graphite Market Outlook, By Aerospace & Defense (2022-2030) (\$MN)
- Table 29 Global Graphite Market Outlook, By Construction (2022-2030) (\$MN)
- Table 30 Global Graphite Market Outlook, By Other End Users (2022-2030) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East &

Africa Regions are also represented in the same manner as above.

I would like to order

Product name: Graphite Market Forecasts to 2030 – Global Analysis by Type (Natural Graphite and Synthetic Graphite), Form (Powder, Granules, Blocks and Other Forms), Application, End User and By Geography

Product link: <https://marketpublishers.com/r/G44DDFD62776EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G44DDFD62776EN.html>