

Carbon Fiber: Global Markets

Market Research Report | 2025-12-26 | 160 pages | BCC Research

AVAILABLE LICENSES:

- Single User License \$4650.00
- 2-5 Users License \$5580.00
- Site License \$6696.00
- Enterprise License \$8035.00

Report description:

Description

Report Scope

The report provides a comprehensive market analysis of the carbon fiber market, reflecting the latest trends and data for the period from 2024 to 2030. The base year of the analysis is 2024, with the forecast period spanning 2025 to 2030. The revenue calculated in this report is in U.S. dollars. This report further provides an in-depth analysis of the industry, both qualitatively and quantitatively.

The global carbon fiber market is segmented into the following categories:

- By raw material (PAN and others).
- By tow size (Small tow of <24K and large tow of >24K).
- By fiber type (Virgin carbon fiber and recycled carbon fiber).
- By end user (Aerospace and defense, wind energy, automotive, sporting goods, pressure vessels, electrical and electronics, marine and others).
- By region (North America, Europe, Asia-Pacific, South America, and the Middle East and Africa).

Report Includes

- 133 data tables and 56 additional tables
- An analysis of the current and future global markets for carbon fibers
- Analyses of the global market trends, with revenue data for 2024, estimates for 2025, forecasts for 2026 and projected CAGRs through 2030
- Estimates of the market size in value and volumetric terms and revenue prospects for the global market, accompanied by a corresponding market share analysis by raw material type, tow size, fiber type, end-use industry and region
- Facts and figures pertaining to market dynamics, technological advances, regulations, prospects and innovations, as well as the impact of macroeconomic variables
- A review of physical properties and manufacturing technologies for carbon fibers

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- Insights derived from Porter's Five Forces model, as well as global supply chain analyses
- Patent review, featuring key granted and published patents
- Analysis of the industry structure, including companies' market shares and rankings, product mappings, strategic initiatives, M&A activity and a venture funding outlook
- Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, as well as the ESG risk ratings and practices of leading companies
- Company profiles of major players within the industry, including Toray Industries Inc., Mitsubishi Chemical Group Corp., Teijin Ltd., Hexcel Corp., and Syensqo

Executive Summary

Summary:

The global market for carbon fiber was valued at \$4.9 billion in 2024 and is estimated to increase from \$5.3 billion in 2025 to reach \$8.2 billion by 2030, at a compound annual growth rate (CAGR) of 9.1% from 2025 through 2030.

Technological Advances and Applications

From a demand perspective, aerospace and defense remain a high-value consumer due to stringent performance requirements, while wind energy and automotive are now the fastest-growing volume markets. The push for larger offshore wind blades, the electrification of vehicle platforms and the adoption of carbon fiber in hydrogen storage tanks are creating new, scalable demand opportunities. Carbon fiber, with its exceptional strength-to-weight ratio, enables manufacturers to reduce component weight by up to 40% to 60% compared with metals without compromising safety or durability. This makes it especially valuable in the aerospace industry, where lighter aircraft reduce fuel use and increase efficiency. It is also beneficial in energy sectors, such as wind power, where carbon fiber enables longer, stiffer turbine blades, and in the automotive industry, where reducing vehicle weight improves fuel economy, boosts EV range and enhances safety.

Table of Contents:

- Table of Contents
- Chapter 1 Executive Summary
- Market Outlook
- Scope of Report
- Market Summary
- Technological Advances and Applications
- Market Dynamics and Growth Factors
- Future Trends and Developments
- Segmental Analysis
- Regional Insights and Emerging Markets
- Conclusion
- Chapter 2 Market Overview
- Market Definition
- Manufacturing Process of Carbon Fiber
- Spinning
- Stabilizing
- Carbonizing
- Surface Treatment

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Sizing
Chapter 3 Market Dynamics
Market Dynamics Snapshot
Drivers
Strict Environmental Regulations of the Aerospace Industry
Need for Lightweight Materials in the Mobility Sector
Growth of the Space Industry
Restrains and Challenges
Harmful Impact of Carbon Fiber
High Cost of Producing Carbon Fiber
Opportunity
Emerging Applications: eVTOL, Hydrogen Infrastructure, Sports Equipment, and Medical Equipment
Chapter 4 Emerging Technologies and Developments
Compatibility of Carbon Fiber in 3D Printing
Bio-Based Carbon Fiber Manufacturing Process
Pitch Production
Carbon Fiber Recycling
Patent Analysis
Methodology
Analysis
Chapter 5 Market Segmentation Analysis
Key Takeaways
Segmentation Breakdown
Market Analysis by Raw Material
Polyacrylonitrile (PAN)
Others
Market Analysis by Tow Size
Small Tow (?24K)
Large Tow (>24K)
Market Analysis by Fiber Type
Virgin
Recycled
Market Analysis by End User
Aerospace and Defense
Wind Energy
Automotive
Sporting Goods
Pressure Vessels
Electrical and Electronics
Marine
Others
Geographic Breakdown
Key Takeaways
Market Analysis by Region
North America
Asia-Pacific
Europe

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

South America
Middle East and Africa
Chapter 6 Competitive Intelligence
Industry Structure
Market Share Analysis
Toray
Mitsubishi Chemical Group
Teijin Ltd.
Hexcel Corp.
Syensqo
Strategic Analysis
Partnerships
Product Launch
Chapter 7 Sustainability in Carbon Fiber: ESG Perspective
Importance of ESG in Carbon Fiber Markets
ESG Practices in the Carbon Fiber Industry
Concluding Remarks from BCC
Chapter 8 Appendix
Methodology
Sources
Abbreviation
Company Profile
A&P TECHNOLOGY INC.
DOWAKSA
FORMOSA PLASTICS CORP.
HEXCEL CORP.
HS HYOSUNG ADVANCED MATERIALS
JIANGSU HENGSHEN CO. LTD.
JILIN CHEMICAL FIBER GROUP CO. LTD.
KUREHA CORP.
MITSUBISHI CHEMICAL GROUP CORP.
NIPPON GRAPHITE FIBER CO. LTD.
SGL CARBON
SYENSQO
TEIJIN LTD.
TORAY INDUSTRIES INC.
UMATEX
ZHONGFU SHENYING CARBON FIBER CO. LTD.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Carbon Fiber: Global Markets

Market Research Report | 2025-12-26 | 160 pages | BCC Research

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4650.00
	2-5 Users License	\$5580.00
	Site License	\$6696.00
	Enterprise License	\$8035.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-03-03"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

