

South Africa Automotive Carbon Fiber Composites - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

<https://marketpublishers.com/r/S0235133F653EN.html>

Date: July 2024

Pages: 80

Price: US\$ 4,750.00 (Single User License)

ID: S0235133F653EN

Abstracts

The South Africa Automotive Carbon Fiber Composites Market size is estimated at USD 280.78 million in 2024, and is expected to reach USD 460.69 million by 2029, growing at a CAGR of 10.41% during the forecast period (2024-2029).

Over the long term, an increasing number of automobile production and sales, rising per capita disposable income of consumers, and growing demand for availing lightweight components to reduce vehicle weight, which ultimately leads to lower carbon emissions, will serve as major determinants for the growth of the South African automotive carbon fiber composites market.

Key Highlights

According to the International Organization for Motor Vehicle Manufacturers (OICA), new commercial vehicle registrations in South Africa reached 165.8 thousand units in 2022 compared to 146.3 thousand units in 2021, representing a Y-o-Y growth of 13.3% between 2021 and 2022.

Heavy truck production in South Africa stood at 30,249 units in 2022 compared to 26,969 units in 2021, recording a Y-o-Y growth of 12% between 2021 and 2022.

Carbon fiber is a lightweight material with high-strength characteristics that can be designed for enhanced performance in automotive applications. It offers improvement in structural, functional, or cosmetic properties. To make vehicles lighter, cleaner, safer, and more cost-effective, the leading carbon fiber suppliers are responding to the needs and expectations of the vehicle OEMs, system suppliers, and customers. One of the

major headwinds for the industry is its low recyclability and higher cost than traditional composites, which leads to hiking the prices of vehicles.

However, with rapid enhancement in carbon fiber technology, which makes it suitable for manufacturing various vehicle parts, and the increasing demand for automakers to replace their existing metal parts with carbon fibers, a massive demand for this composite type is expected in the coming years. Many car companies, such as BMW, Audi, GM, Honda, and Polestar, have established mass production agreements with carbon fiber material producers. They are investing in their processes to support low-cost carbon fiber manufacturing.

South Africa Automotive Carbon Fiber Composites Market Trends

Passengers Cars to Gain Traction During the Forecast Period

Consumers increasingly prefer to use private transportation mediums due to increasing urbanization and growing purchasing power across South Africa. As more consumers migrate to urban areas for better employment and financial opportunities, a massive demand for passenger cars will exist in the country, which will assist in expanding the market for carbon fiber composites as automakers strategize to use this material in their vehicles to reduce carbon emissions.

According to the World Bank, the urban population as a percentage of the overall population in South Africa stood at 68.33% in 2022 compared to 67.84% in 2021.

According to the International Organization of Motor Vehicle Manufacturers (OICA), new passenger car sales in South Africa reached 363.6 thousand units in 2022 compared to 304.3 thousand units in 2021, recording a Y-o-Y growth of 19.5% between 2021 and 2022.

South Africa is one of the leading countries with optimal automotive manufacturing capacity on the African continent. Therefore, to cater to the surging demand for passenger cars, manufacturers are ramping up their production capacities in the country, which is fuelling the demand for carbon fiber composites. Advanced materials such as carbon fiber are essential for boosting the fuel economy of modern cars while maintaining performance and safety. An estimated 10% reduction in the vehicle's weight can transpire to a 6-8% increase in fuel economy. Since it takes less energy to accelerate a lighter object than a heavier one, lightweight materials offer great potential for increasing vehicle efficiency and fuel economy.

In March 2023, Stellantis signed an MoU with the Industrial Development Corporation (IDC) and the Department of Trade, Industry, and Competition to develop a manufacturing facility in South Africa by the end of 2025. This project aims to ensure that the company can sell one million vehicles in the region by 2030 with 70% regional production autonomy.

With the improvements in road transportation infrastructure and the government's initiatives to make South Africa a leading automotive manufacturing hub in Africa, a massive demand for passenger cars will exist, thus positively impacting the demand for carbon fiber composites in the coming years.

Exterior Segment to be the Dominant Category by Application Type During the Forecast Period

Among applications, the exterior segment is expected to lead the market for automotive carbon fiber in terms of value and volume. The growth of this market segment can be attributed to the increased demand from manufacturers to produce several exterior parts, such as fenders, hoods, bumper beams, and deck lids of vehicles. Adopting carbon fiber increases the durability of vehicles, thereby ensuring a long life cycle of the parts and vehicle. The exterior parts of vehicles manufactured from composites also offer high stiffness, resulting in minimum damage to occupants in case of accidents. Therefore, with the rising vehicle production across the country, the demand for carbon fiber composites utilized in the production of exterior body parts showcases surging growth.

According to the OICA, new passenger car production in the country reached 309.4 thousand units in 2022 compared to 239.2 thousand units in 2021, representing a Y-o-Y growth of 29% between 2021 and 2022.

The government's aggressive push toward the adoption of electric vehicles and shifting consumer preferences to avail of eco-friendly vehicles are fuelling the growth of the EV market in South Africa, thus positively impacting the demand in the exterior segment of the market, as automakers increasingly prefer to utilize carbon fiber composites to manufacture exterior body parts of EVs.

The government of South Africa has committed to reducing carbon emissions by 40%

below the 2010 level by 2030 and reaching net zero carbon emissions by 2050 as part of its long-term strategy.

In December 2023, the South African Ministry of Trade announced its plan to manufacture the country's first electric vehicle by 2026 as part of the broader “Just Energy Transition (JET)” plan for a low-carbon and climate-resilient economy. The Ministry stated that the transport sector needs an investment of USD 6.84 billion from 2023 to 2027 to contribute to the country's decarbonization commitments.

With such developments in the country's EV charging infrastructure and the integration of various EV players, such as Telkom, the demand for carbon fiber composites for producing exterior body parts is expected to grow massively during the forecast period.

South Africa Automotive Carbon Fiber Composites Industry Overview

The South African automotive carbon fiber composites market is fragmented and highly competitive due to various international and domestic players operating in the ecosystem. Some of the major players include Hexcel Corporation, Mitsubishi Chemical Group Corporation, SGL Carbon SE, Teijin Ltd, BFG International, Nippon Sheet Glass Co. Ltd, Sigmatex (UK) Limited, Solvay SA, Magna International Inc., Menzolit, and Lanxess AG. These players actively invest hefty sums to constantly innovate their material technology solutions to produce carbon fiber composites and optimize their manufacturing process to expand their production capacities.

In October 2023, Mitsubishi Chemical Group (MCG) announced the acquisition of CPC SRL (CPC), an Italian company specializing in the manufacturing and distribution of automobile components crafted from carbon fiber reinforced plastic (CFRP). This acquisition aligns with MCG Group's long-term strategic vision to further expand and enhance its vertically integrated automotive carbon fiber supply chain worldwide, including in South Africa.

In July 2023, Hyundai announced its plan to partner with Dymag Wheels to offer carbon-hybrid wheels on future models from Hyundai N's performance division. The company stated that the new carbon-hybrid wheel will help the N models save around 40-50% of weight compared to traditional alloy wheels while improving stiffness and strength. It will be available to customers worldwide, including those from South Africa.

The market is anticipated to witness the launch of advanced carbon fiber composite materials to cater to the increased demand from automakers to incorporate lightweight components in vehicles and complement government efforts to promote the reduction of vehicle weight, thus leading to lower carbon emissions.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

Contents

1 INTRODUCTION

- 1.1 Study Assumptions
- 1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

- 4.1 Market Drivers
 - 4.1.1 Increasing Demand for Lightweight and Energy-efficient Automotive Components to Foster the Growth of the Target Market
- 4.2 Market Restraints
 - 4.2.1 High Manufacturing and Processing Cost of Composites
- 4.3 Industry Attractiveness - Porter's Five Forces Analysis
 - 4.3.1 Threat of New Entrants
 - 4.3.2 Bargaining Power of Buyers/Consumers
 - 4.3.3 Bargaining Power of Suppliers
 - 4.3.4 Threat of Substitute Products
 - 4.3.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION (MARKET SIZE IN VALUE - USD)

- 5.1 By Vehicle Type
 - 5.1.1 Passenger Cars
 - 5.1.2 Commercial Vehicles
- 5.2 By Application
 - 5.2.1 Structural Assembly
 - 5.2.2 Powertrain Component
 - 5.2.3 Interior
 - 5.2.4 Exterior
 - 5.2.5 Others (Underbody, Etc.)
- 5.3 By Manufacturing Process
 - 5.3.1 Compression Molding
 - 5.3.2 Injection Molding

- 5.3.3 Resin Transfer Molding
- 5.3.4 Others (Oven Molding, Etc.)

6 COMPETITIVE LANDSCAPE

- 6.1 Vendor Market Share
- 6.2 Company Profiles*
 - 6.2.1 Hexcel Corporation
 - 6.2.2 Mitsubishi Chemical Group Corporation (MCG)
 - 6.2.3 SGL Carbon SE
 - 6.2.4 Teijin Ltd
 - 6.2.5 BFG International
 - 6.2.6 Nippon Sheet Glass Co. Ltd
 - 6.2.7 Sigmatech (UK) Limited
 - 6.2.8 Solvay SA
 - 6.2.9 Magna International Inc.
 - 6.2.10 Menzolit
 - 6.2.11 Lanxess AG
 - 6.2.12 BASF SE

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

- 7.1 Rising Adoption of Electric Vehicles Fuels the Market Demand

I would like to order

Product name: South Africa Automotive Carbon Fiber Composites - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

Product link: <https://marketpublishers.com/r/S0235133F653EN.html>

Price: US\$ 4,750.00 (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/S0235133F653EN.html>