

Global Automotive Polymer Composites Market Size Study by Material (Epoxy, Polyurethane, Polyamide, Polypropylene, Polyethylene, Polyester, Vinyl Ester, Others), by Product (Glass Fiber Reinforced Polymer Composite, Natural Fiber Reinforced Polymer Composite, Carbon Fiber Reinforced Polymer Composite), by Application (Interior Components, Exterior Components, Structural Components, Powertrain Components), by End Use (Conventional Vehicles, Electrical Vehicles, Trucks & Buses), by Manufacturing Process (Compression Molding, Injection Molding, Sheet Molding, Resin Transfer Molding), and Regional Forecasts 2022-2032

<https://marketpublishers.com/r/G08F9E96E6CAEN.html>

Date: January 2025

Pages: 285

Price: US\$ 3,218.00 (Single User License)

ID: G08F9E96E6CAEN

Abstracts

The Global Automotive Polymer Composites Market is valued at approximately USD 10.2 billion in 2023 and is anticipated to grow at a healthy CAGR of 5.00% over the forecast period 2024-2032. Automotive polymer composites represent a transformative force in modern vehicle manufacturing, leveraging advanced materials and processes to enhance performance, reduce weight, and align with the increasing demand for energy efficiency and sustainability. These composites, characterized by their lightweight properties and exceptional durability, have become integral to the automotive sector's evolution, particularly in the context of electric vehicles (EVs) and green mobility initiatives.

The market is driven by the expanding adoption of electric and hybrid vehicles, coupled with stringent regulations aimed at reducing carbon emissions. Polymer composites offer a pathway to achieving lighter vehicles, which translates to improved fuel efficiency and extended battery ranges for EVs. Additionally, advancements in manufacturing processes, such as injection molding and resin transfer molding, have paved the way for cost-effective mass production of intricate composite components. The increasing use of carbon fiber reinforced composites in high-performance vehicles further underscores the material's growing prominence in the automotive sector.

However, challenges persist, including the high initial costs of composite materials and the complexities associated with recycling. Nonetheless, ongoing research and development activities are fostering innovations in recyclable composites and bio-based polymers, which are expected to mitigate these challenges. Moreover, collaborations between automotive manufacturers and material science companies are accelerating the integration of advanced composites, addressing key concerns and broadening their applicability across various vehicle categories.

Regionally, the Asia-Pacific market dominates due to the presence of major automotive manufacturing hubs in countries such as China, India, and Japan, coupled with the region's burgeoning EV industry. North America and Europe also hold substantial shares, driven by a focus on sustainability and innovation in automotive design. Meanwhile, Latin America and the Middle East & Africa are experiencing steady growth, propelled by increasing urbanization and rising demand for commercial vehicles.

Major market players included in this report are:

Mitsubishi Chemical Holdings Corporation

Hexcel Corporation

Owens Corning

Toray Industries, Inc.

SGL Carbon SE

Teijin Limited

BASF SE

Solvay S.A.

SABIC

Huntsman Corporation

Cytec Solvay Group

Arkema S.A.

TPI Composites, Inc.

Hanwha Solutions

UFP Technologies, Inc.

The detailed segments and sub-segments of the market are explained below:

By Material:

Epoxy

Polyurethane

Polyamide

Polypropylene

Polyethylene

Polyester

Vinyl Ester

Others

By Product:

Glass Fiber Reinforced Polymer Composite

Natural Fiber Reinforced Polymer Composite

Carbon Fiber Reinforced Polymer Composite

By Application:

Interior Components

Exterior Components

Structural Components

Powertrain Components

By End Use:

Conventional Vehicles

Electric Vehicles

Trucks & Buses

By Manufacturing Process:

Compression Molding

Injection Molding

Sheet Molding

Resin Transfer Molding

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

Rest of Europe

Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

Latin America

Brazil

Mexico

Rest of Latin America

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

Years considered for the study are as follows:

Historical year – 2022

Base year – 2023

Forecast period – 2024 to 2032

Key Takeaways:

Market estimates and forecasts for a 10-year period from 2022 to 2032.

Regional-level and annualized revenue analysis for each market segment.

Comprehensive analysis of the competitive landscape, including strategies adopted by key players.

Insights into demand-side and supply-side market dynamics.

Recommendations for stakeholders based on in-depth market research.

Contents

CHAPTER 1. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET EXECUTIVE SUMMARY

- 1.1. Global Automotive Polymer Composites Market Size & Forecast (2022-2032)
- 1.2. Regional Summary
- 1.3. Segmental Summary
 - 1.3.1. By Material
 - 1.3.2. By Product
 - 1.3.3. By Application
 - 1.3.4. By End Use
 - 1.3.5. By Manufacturing Process
- 1.4. Key Trends
- 1.5. Recession Impact
- 1.6. Analyst Recommendation & Conclusion

CHAPTER 2. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET DEFINITION AND RESEARCH ASSUMPTIONS

- 2.1. Research Objective
- 2.2. Market Definition
- 2.3. Research Assumptions
 - 2.3.1. Inclusion & Exclusion
 - 2.3.2. Limitations
 - 2.3.3. Supply Side Analysis
 - 2.3.3.1. Availability
 - 2.3.3.2. Infrastructure
 - 2.3.3.3. Regulatory Environment
 - 2.3.3.4. Market Competition
 - 2.3.3.5. Economic Viability (Consumer's Perspective)
 - 2.3.4. Demand Side Analysis
 - 2.3.4.1. Regulatory Frameworks
 - 2.3.4.2. Technological Advancements
 - 2.3.4.3. Environmental Considerations
 - 2.3.4.4. Consumer Awareness & Acceptance
- 2.4. Estimation Methodology
- 2.5. Years Considered for the Study
- 2.6. Currency Conversion Rates

CHAPTER 3. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET DYNAMICS

3.1. Market Drivers

- 3.1.1. Expanding Adoption of Electric and Hybrid Vehicles
- 3.1.2. Stringent Regulations on Carbon Emissions
- 3.1.3. Advancements in Manufacturing Processes

3.2. Market Challenges

- 3.2.1. High Initial Costs of Composite Materials
- 3.2.2. Complexities Associated with Recycling

3.3. Market Opportunities

- 3.3.1. Innovations in Recyclable and Bio-Based Polymers
- 3.3.2. Collaborations Between Automotive Manufacturers and Material Science Companies

- 3.3.3. Expansion into Emerging Vehicle Categories

CHAPTER 4. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET INDUSTRY ANALYSIS

4.1. Porter's 5 Force Model

- 4.1.1. Bargaining Power of Suppliers
- 4.1.2. Bargaining Power of Buyers
- 4.1.3. Threat of New Entrants
- 4.1.4. Threat of Substitutes
- 4.1.5. Competitive Rivalry
- 4.1.6. Futuristic Approach to Porter's 5 Force Model
- 4.1.7. Porter's 5 Force Impact Analysis

4.2. PESTEL Analysis

- 4.2.1. Political
- 4.2.2. Economical
- 4.2.3. Social
- 4.2.4. Technological
- 4.2.5. Environmental
- 4.2.6. Legal

4.3. Top Investment Opportunities

4.4. Top Winning Strategies

4.5. Disruptive Trends

4.6. Industry Expert Perspective

4.7. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET SIZE & FORECASTS BY MATERIAL 2022-2032

5.1. Segment Dashboard

5.2. Global Automotive Polymer Composites Market: Material Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

- 5.2.1. Epoxy
- 5.2.2. Polyurethane
- 5.2.3. Polyamide
- 5.2.4. Polypropylene
- 5.2.5. Polyethylene
- 5.2.6. Polyester
- 5.2.7. Vinyl Ester
- 5.2.8. Others

CHAPTER 6. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET SIZE & FORECASTS BY PRODUCT 2022-2032

6.1. Segment Dashboard

6.2. Global Automotive Polymer Composites Market: Product Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

- 6.2.1. Glass Fiber Reinforced Polymer Composite
- 6.2.2. Natural Fiber Reinforced Polymer Composite
- 6.2.3. Carbon Fiber Reinforced Polymer Composite

CHAPTER 7. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET SIZE & FORECASTS BY APPLICATION 2022-2032

7.1. Segment Dashboard

7.2. Global Automotive Polymer Composites Market: Application Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

- 7.2.1. Interior Components
- 7.2.2. Exterior Components
- 7.2.3. Structural Components
- 7.2.4. Powertrain Components

CHAPTER 8. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET SIZE &

FORECASTS BY END USE 2022-2032

8.1. Segment Dashboard

8.2. Global Automotive Polymer Composites Market: End Use Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

8.2.1. Conventional Vehicles

8.2.2. Electric Vehicles

8.2.3. Trucks & Buses

CHAPTER 9. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET SIZE & FORECASTS BY MANUFACTURING PROCESS 2022-2032

9.1. Segment Dashboard

9.2. Global Automotive Polymer Composites Market: Manufacturing Process Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

9.2.1. Compression Molding

9.2.2. Injection Molding

9.2.3. Sheet Molding

9.2.4. Resin Transfer Molding

CHAPTER 10. GLOBAL AUTOMOTIVE POLYMER COMPOSITES MARKET SIZE & FORECASTS BY REGION 2022-2032

10.1. North America Automotive Polymer Composites Market

10.1.1. U.S. Automotive Polymer Composites Market

10.1.1.1. Material Breakdown Size & Forecasts, 2022-2032

10.1.1.2. Product Breakdown Size & Forecasts, 2022-2032

10.1.2. Canada Automotive Polymer Composites Market

10.2. Europe Automotive Polymer Composites Market

10.2.1. UK Automotive Polymer Composites Market

10.2.2. Germany Automotive Polymer Composites Market

10.2.3. France Automotive Polymer Composites Market

10.2.4. Spain Automotive Polymer Composites Market

10.2.5. Italy Automotive Polymer Composites Market

10.2.6. Rest of Europe Automotive Polymer Composites Market

10.3. Asia-Pacific Automotive Polymer Composites Market

10.3.1. China Automotive Polymer Composites Market

10.3.2. India Automotive Polymer Composites Market

10.3.3. Japan Automotive Polymer Composites Market

- 10.3.4. Australia Automotive Polymer Composites Market
- 10.3.5. South Korea Automotive Polymer Composites Market
- 10.3.6. Rest of Asia Pacific Automotive Polymer Composites Market
- 10.4. Latin America Automotive Polymer Composites Market
 - 10.4.1. Brazil Automotive Polymer Composites Market
 - 10.4.2. Mexico Automotive Polymer Composites Market
 - 10.4.3. Rest of Latin America Automotive Polymer Composites Market
- 10.5. Middle East & Africa Automotive Polymer Composites Market
 - 10.5.1. Saudi Arabia Automotive Polymer Composites Market
 - 10.5.2. South Africa Automotive Polymer Composites Market
 - 10.5.3. Rest of Middle East & Africa Automotive Polymer Composites Market

CHAPTER 11. COMPETITIVE INTELLIGENCE

- 11.1. Key Company SWOT Analysis
 - 11.1.1. Mitsubishi Chemical Holdings Corporation
 - 11.1.2. Hexcel Corporation
 - 11.1.3. Owens Corning
- 11.2. Top Market Strategies
- 11.3. Company Profiles
 - 11.3.1. Mitsubishi Chemical Holdings Corporation
 - 11.3.1.1. Key Information
 - 11.3.1.2. Overview
 - 11.3.1.3. Financial (Subject to Data Availability)
 - 11.3.1.4. Product Summary
 - 11.3.1.5. Market Strategies
 - 11.3.2. Hexcel Corporation
 - 11.3.3. Owens Corning
 - 11.3.4. Toray Industries, Inc.
 - 11.3.5. SGL Carbon SE
 - 11.3.6. Teijin Limited
 - 11.3.7. BASF SE
 - 11.3.8. Solvay S.A.
 - 11.3.9. SABIC
 - 11.3.10. Huntsman Corporation

CHAPTER 12. RESEARCH PROCESS

- 12.1. Research Process

- 12.1.1. Data Mining
- 12.1.2. Analysis
- 12.1.3. Market Estimation
- 12.1.4. Validation
- 12.1.5. Publishing
- 12.2. Research Attributes

List Of Tables

LIST OF TABLES

TABLE 1. Global Automotive Polymer Composites Market, Report Scope

TABLE 2. Global Automotive Polymer Composites Market Estimates & Forecasts by Region 2022-2032 (USD Million/Billion)

TABLE 3. Global Automotive Polymer Composites Market Estimates & Forecasts by Material 2022-2032 (USD Million/Billion)

TABLE 4. Global Automotive Polymer Composites Market Estimates & Forecasts by Product 2022-2032 (USD Million/Billion)

TABLE 5. Global Automotive Polymer Composites Market Estimates & Forecasts by Application 2022-2032 (USD Million/Billion)

TABLE 6. Global Automotive Polymer Composites Market Estimates & Forecasts by End Use 2022-2032 (USD Million/Billion)

TABLE 7. Global Automotive Polymer Composites Market Estimates & Forecasts by Manufacturing Process 2022-2032 (USD Million/Billion)

TABLE 8. Global Automotive Polymer Composites Market by Segment, Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 9. Global Automotive Polymer Composites Market by Region, Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 10. Global Automotive Polymer Composites Market by Segment, Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 11. Global Automotive Polymer Composites Market by Region, Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 12. Global Automotive Polymer Composites Market by Segment, Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 13. Global Automotive Polymer Composites Market by Region, Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 14. Global Automotive Polymer Composites Market by Segment, Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 15. U.S. Automotive Polymer Composites Market Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 16. U.S. Automotive Polymer Composites Market Estimates & Forecasts by Segment 2022-2032 (USD Million/Billion)

TABLE 17. U.S. Automotive Polymer Composites Market Estimates & Forecasts by Segment 2022-2032 (USD Million/Billion)

TABLE 18. Canada Automotive Polymer Composites Market Estimates & Forecasts, 2022-2032 (USD Million/Billion)

TABLE 19. Canada Automotive Polymer Composites Market Estimates & Forecasts by Segment 2022-2032 (USD Million/Billion)

TABLE 20. Canada Automotive Polymer Composites Market Estimates & Forecasts by Segment 2022-2032 (USD Million/Billion)

.....

List Of Figures

LIST OF FIGURES

- FIG 1. Global Automotive Polymer Composites Market, Research Methodology
- FIG 2. Global Automotive Polymer Composites Market, Market Estimation Techniques
- FIG 3. Global Market Size Estimates & Forecast Methods
- FIG 4. Global Automotive Polymer Composites Market, Key Trends 2023
- FIG 5. Global Automotive Polymer Composites Market, Growth Prospects 2022-2032
- FIG 6. Global Automotive Polymer Composites Market, Porter's 5 Force Model
- FIG 7. Global Automotive Polymer Composites Market, PESTEL Analysis
- FIG 8. Global Automotive Polymer Composites Market, Value Chain Analysis
- FIG 9. Global Automotive Polymer Composites Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 10. Global Automotive Polymer Composites Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 11. Global Automotive Polymer Composites Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 12. Global Automotive Polymer Composites Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 13. Global Automotive Polymer Composites Market by Segment, 2022 & 2032 (USD Million/Billion)
- FIG 14. Global Automotive Polymer Composites Market, Regional Snapshot 2022 & 2032
- FIG 15. North America Automotive Polymer Composites Market 2022 & 2032 (USD Million/Billion)
- FIG 16. Europe Automotive Polymer Composites Market 2022 & 2032 (USD Million/Billion)
- FIG 17. Asia Pacific Automotive Polymer Composites Market 2022 & 2032 (USD Million/Billion)
- FIG 18. Latin America Automotive Polymer Composites Market 2022 & 2032 (USD Million/Billion)
- FIG 19. Middle East & Africa Automotive Polymer Composites Market 2022 & 2032 (USD Million/Billion)
- FIG 20. Global Automotive Polymer Composites Market, Company Market Share Analysis (2023)

.....

This list is not complete, final report does contain more than 50 figures. The list may be updated in the final deliverable.

I would like to order

Product name: Global Automotive Polymer Composites Market Size Study by Material (Epoxy, Polyurethane, Polyamide, Polypropylene, Polyethylene, Polyester, Vinyl Ester, Others), by Product (Glass Fiber Reinforced Polymer Composite, Natural Fiber Reinforced Polymer Composite, Carbon Fiber Reinforced Polymer Composite), by Application (Interior Components, Exterior Components, Structural Components, Powertrain Components), by End Use (Conventional Vehicles, Electrical Vehicles, Trucks & Buses), by Manufacturing Process (Compression Molding, Injection Molding, Sheet Molding, Resin Transfer Molding), and Regional Forecasts 2022-2032

Product link: <https://marketpublishers.com/r/G08F9E96E6CAEN.html>

Price: US\$ 3,218.00 (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/G08F9E96E6CAEN.html>