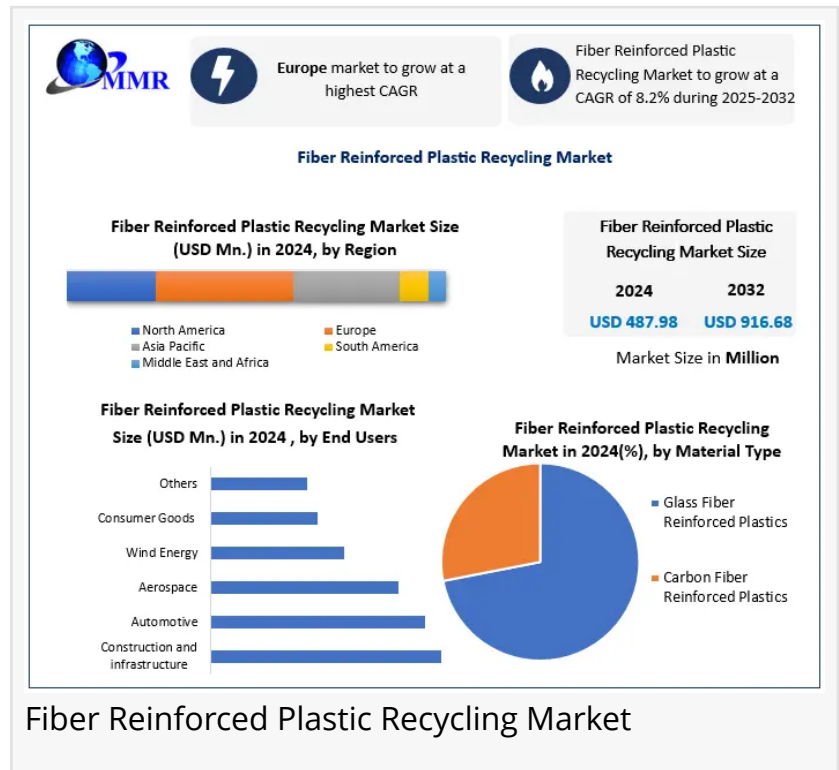


# Fiber Reinforced Plastic Recycling Market Size to Reach USD 916.68 Million by 2032: Forecast & Competitive Analysis

*The Fiber Reinforced Plastic Recycling Market is growing as industries adopt sustainable methods to recover and reuse composite materials efficiently.*

WILMINGTON, DE, UNITED STATES, December 9, 2025 /EINPresswire.com/ -- Global [Fiber Reinforced Plastic Recycling Market](#) size, valued at USD 487.98 million in 2024, is projected to expand steadily, with the market expected to grow at a CAGR of 8.2% from 2025 to 2032, ultimately reaching USD 916.68 million.

Global Fiber Reinforced Plastic Recycling Market Soars with Next-Gen Technologies, Sustainable Innovations, and High-Growth Opportunities



Fiber Reinforced Plastic Recycling Market Report 2025 provides an in-depth analysis of market trends, size, and forecasts through 2032. The industry is experiencing robust growth driven by rising demand for sustainable and high-performance recycled composites. Increasing adoption of advanced recycling technologies such as pyrolysis, solvolysis, and microwave-assisted recycling is transforming the market landscape. Expansion in automotive, aerospace, construction, and wind energy sectors, along with corporate sustainability initiatives and strict environmental regulations, continues to shape the global Fiber Reinforced Plastic Recycling Market. Innovations in high-purity carbon fiber recovery, AI-

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Breaking: Maximize Market Research highlights Fiber Reinforced Plastic Recycling Market boom with advanced recycling tech and strategic global partnerships fueling innovation.”

*Dharti Raut*

enabled automation, and regional expansion across Asia-Pacific and Europe are key factors fueling market growth worldwide.

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What’s Driving the Rise of the Global Fiber Reinforced Plastic Recycling Market? Explore How Innovation and Sustainability Are Shaping 2032

Global Fiber Reinforced Plastic Recycling Market Segments Covered	
By Material Type	Glass Fiber Reinforced Plastics Carbon Fiber Reinforced Plastics
By Recycling Technology	Mechanical Recycling Thermal Recycling (Pyrolysis, Fluidized Bed) Chemical Recycling (Solvolysis, Enzymatic) Emerging Methods
By End-Users	Construction and Infrastructure Wind Energy Automotive Aerospace Wind Energy Consumer Goods Others
By Region	<b>North America (United States, Canada and Mexico)</b> <b>Europe</b> (UK, France, Germany, Italy, Spain, Sweden, Austria, Turkey, Russia and Rest of Europe) <b>Asia Pacific (China, India, Japan, South Korea, Australia, ASEAN (Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam etc.) and of APAC)</b> <b>Middle East and Africa</b> (South Africa, GCC, Egypt, Nigeria and Rest of ME) <b>South America</b> (Brazil, Argentina, Colombia and Rest of South America)

Fiber Reinforced Plastic Recycling Market is growing rapidly as industries adopt advanced recycling technologies such as pyrolysis, solvolysis, and microwave-assisted processes to recover high-purity fibers. Rising demand for eco-friendly composites in automotive, aerospace, construction, and wind energy sectors, coupled with strict environmental regulations and corporate sustainability initiatives, is fueling market expansion and shaping the future of global FRP recycling.

Next-Gen Technologies Power Explosive Growth in the Fiber Reinforced Plastic Recycling Market: Key Drivers Reshaping Global Sustainability

Global Fiber Reinforced Plastic Recycling Market is gaining strong momentum as innovations such as pyrolysis, solvolysis, microwave-assisted recycling, and high-purity carbon fiber recovery systems redefine efficiency and sustainability. Growing environmental regulations, rising demand for recycled composites, and increased R&D investments are accelerating industry adoption. These breakthroughs are enhancing recycling performance and generating significant interest in next-generation circular economy solutions.

Critical Challenges Hindering the Fiber Reinforced Plastic Recycling Market: Key Restraints Shaping Global Growth

Global Fiber Reinforced Plastic Recycling Market faces notable restraints, including high processing costs, strength loss during fiber recovery, and limited global recycling infrastructure. These challenges slow industrial adoption and raise operational complexities. However, advancements in low-cost pyrolysis, solvolysis, and chemical recycling technologies, coupled with strict sustainability mandates, are prompting curiosity about how the sector will overcome these long-standing barriers.

Emerging Opportunities in the Fiber Reinforced Plastic Recycling Market: Innovations Driving

## Global Sustainability and Circular Economy Growth

Global Fiber Reinforced Plastic Recycling Market is entering a high-growth phase as global sustainability policies, UN Plastic Waste Treaty goals, and corporate net-zero commitments drive demand for recycled composites. Innovations in chemical recycling, high-strength carbon fiber recovery, and advanced FRP processing systems are opening new opportunities in automotive, wind energy, and construction sectors, creating strong investor appeal and accelerating the shift toward a circular manufacturing ecosystem.

### Strategic Market Segmentation Unveils High-Growth Opportunities in the Fiber Reinforced Plastic Recycling Industry

Fiber Reinforced Plastic Recycling Market is strategically segmented by material type, recycling technology, and end-use industry, revealing lucrative growth opportunities. Glass-fiber reinforced plastics dominate cost-effective, high-volume applications in construction, wind energy, and automotive sectors, while mechanical recycling leads due to lower operational costs. Rapid adoption in aerospace, infrastructure, and consumer goods is driving the market's sustainable circular economy transformation, attracting investor attention and signaling strong global growth potential.

Feel free to request a complimentary sample copy or view a summary of the report @ <https://www.maximizemarketresearch.com/request-sample/281151/>

### Advance Innovations and Regulations Driving Explosive Growth in the Fiber Reinforced Plastic Recycling Market

Strict government policies, especially in Europe, prohibiting composite landfilling are accelerating adoption of sustainable FRP recycling solutions. These regulations are driving the development of eco-friendly, high-efficiency recycling technologies, opening lucrative growth opportunities and positioning the Fiber Reinforced Plastic Recycling Market as a leader in global circular economy initiatives.

Breakthrough mechanical, thermal (pyrolysis), and chemical (solvolysis) recycling methods are boosting fiber and resin recovery rates, making FRP recycling economically viable, scalable, and sustainable. These technological innovations are transforming the market landscape, enhancing productivity, and attracting investor interest in next-generation composite recycling solutions.

The integration of artificial intelligence and automation in sorting, material identification, and quality control is revolutionizing recycling operations. These smart technologies minimize material loss, reduce operational costs, and optimize throughput, driving rapid growth and positioning the Fiber Reinforced Plastic Recycling Market at the forefront of sustainable circular economy transformation.

## Strategic Partnerships and Global Expansions Propel the Fiber Reinforced Plastic Recycling Market to New Heights

In January 2024, ELG Carbon Fibre Ltd. (UK) expanded its Ohio facility to a 12,000-ton annual capacity, becoming the world's largest carbon fiber recycler. This strategic expansion strengthens its dominance in automotive and aerospace FRP recycling, setting a global benchmark for high-efficiency, large-scale sustainable recycling operations.

In February 2024, Vartega Inc. (USA) signed a 5-year contract with Ford to supply high-quality recycled carbon fiber for F-150 truck components. This partnership underscores the rising demand for eco-friendly, high-performance FRP materials and reinforces the market's transformation toward sustainable automotive solutions.

In March 2024, Toray Industries (Japan) signed a development agreement with Toyota to integrate recycled CFRP in EV battery casings, targeting 2025 production. This initiative highlights innovative applications of recycled composites, supports circular economy adoption, and drives forward the global Fiber Reinforced Plastic Recycling Market in the rapidly growing electric vehicle sector.

### Fiber Reinforced Plastic Recycling Market Competitive Landscape:

Fiber Reinforced Plastic Recycling Market is dominated by global leaders driving technological innovation and large-scale sustainable recycling adoption. ELG Carbon Fibre (UK) and Toray Industries (Japan) leverage massive production capacity and strategic aerospace and automotive partnerships, while Carbon Conversions (USA) and Mitsubishi Chemical (Japan) focus on high-performance recycled CFRP, positioning themselves at the forefront of the global circular economy transformation.

Pioneers like SIGRA Composite (Germany) are redefining the market with solvolysis-based recycling technologies for wind turbine blades, highlighting regulatory-driven innovation in Europe. Strategic collaborations, cutting-edge pyrolysis, chemical recycling, and advanced FRP processing technologies, and targeted industry focus are enabling these companies to outpace competitors, drive sustainable FRP recycling solutions, and capture high-value opportunities in automotive, aerospace, and renewable energy sectors.

### Europe Dominates While Asia-Pacific Surges: Key Regional Insights in the Fiber Reinforced Plastic Recycling Market

Europe leads the Fiber Reinforced Plastic Recycling Market, capturing over 45% of global share in 2024, fueled by strict EU regulations, landfill bans, and circular economy mandates. Industry leaders like Siemens Gamesa and Vestas are pioneering scalable, sustainable FRP recycling solutions, while significant R&D investments and mature recycling infrastructure reinforce Europe's global dominance in eco-friendly composite recycling.

Asia-Pacific Fiber Reinforced Plastic Recycling Market is the fastest-growing globally, driven by rapid industrialization in China and India, rising wind turbine waste, and zero-waste city initiatives. Adoption of cost-effective mechanical recycling, advanced FRP technologies, and expansion in construction and automotive sectors is enabling Asia-Pacific to outpace Europe and North America, attracting strong investor interest and accelerating sustainable circular economy growth.

#### Leading Players in the Fiber Reinforced Plastic Recycling:

##### North America

Carbon Conversions, Inc. – South Carolina, USA

Vartega Inc. – Colorado, USA

Shocker Composites LLC – Kansas, USA

MIT-RCF (Materials Innovation Technologies) – North Carolina, USA

ELG Carbon Fibre Ltd. – Ohio, USA

##### Europe

SIGRA Composite – Germany

ELG Carbon Fibre Ltd. – UK

Recyclable Carbon Fiber Ltd. – UK

Carbon Fiber Recycling – Netherlands

FiberEUse (EU-funded consortium) – Multi-country (Italy-led)

Composites Evolution Ltd. – UK (Recycled flax/carbon fibers)

ECOBULK (EU Horizon 2020 Project) – Spain/Germany

##### Asia Pacific

Toray Industries, Inc. - Japan

Mitsubishi Chemical Corporation - Japan

Carbon Nexus - Australia

Jiangsu Jiuding New Material Co., Ltd. - China

Hadeg Recycling - India

Karborek Recycling - India

##### Middle East and Africa

Carbon Middle East – UAE

SABIC – Saudi Arabia

Enviroserve – UAE

Taha Asia Carbon Fiber – South Africa

Mectech Fibre Glass – Egypt

South America

Tecniplas – Brazil

Elekeiroz – Brazil

Carborec – Argentina

Polimeros Recicladados – Chile

Ecofibras – Colombia

## Strategic Growth Drivers and Technological Advancements Shaping the Global Fiber Reinforced Plastic Recycling Market | Forecast 2025–2032

- **Rising Environmental Regulations:** Governments worldwide, especially in Europe, are enforcing strict landfill bans and circular economy mandates, boosting adoption of sustainable FRP recycling solutions.
- **Technological Innovations:** Advanced recycling methods such as pyrolysis, solvolysis, microwave-assisted recycling, and high-purity carbon fiber recovery are enhancing efficiency, fiber quality, and operational scalability.
- **Industrial Demand Growth:** The automotive, aerospace, construction, and wind energy sectors are driving increased use of recycled composites for lightweight, high-strength, and sustainable applications.
- **Sustainability Shift:** Rising corporate net-zero commitments and UN Plastic Waste Treaty goals are fueling investments in circular economy models and eco-friendly recycling infrastructure.
- **AI & Automation Integration:** Smart sorting, material identification, and quality control systems are improving process efficiency, reducing costs, and minimizing material loss.
- **Strategic Partnerships & Global Expansions:** Collaborations among market leaders like ELG Carbon Fibre, Vartega, and Toray Industries are strengthening supply chains and supporting large-scale, sustainable FRP recycling operations.

### FAQs:

What is the projected size of the Fiber Reinforced Plastic Recycling Market by 2032?

Ans: Global Fiber Reinforced Plastic Recycling Market is expected to reach USD 916.68 million by 2032, growing at a CAGR of 8.2% from 2025 to 2032.

What are the key drivers of growth in the Fiber Reinforced Plastic Recycling Market?

Ans: Growth is driven by technological innovations such as pyrolysis, solvolysis, microwave-assisted recycling, rising demand for recycled composites, and stricter environmental regulations promoting circular economy adoption.

What challenges or restraints is the market facing?

Ans: The market faces high processing costs, fiber strength loss during recycling, and limited

global recycling infrastructure, although advancements in low-cost recycling methods and sustainability mandates are mitigating these challenges.

Which regions dominate the Fiber Reinforced Plastic Recycling Market?

Ans: Europe leads with over 45% global share, driven by strict EU regulations and mature infrastructure, while Asia-Pacific is the fastest-growing region, fueled by industrialization, renewable energy initiatives, and cost-effective recycling technologies.

Who are the leading players in the Fiber Reinforced Plastic Recycling Market?

Ans: Key players include ELG Carbon Fibre (UK), Toray Industries (Japan), Carbon Conversions (USA), SIGRA Composite (Germany), and Mitsubishi Chemical (Japan), leveraging scale, innovation, and strategic industry partnerships.

Analyst Perspective:

Industry analysts observe that the Fiber Reinforced Plastic Recycling sector is gaining significant traction as innovations in mechanical, thermal, and chemical recycling technologies drive operational efficiency and sustainability. Leading players such as ELG Carbon Fibre, Toray Industries, and SIGRA Composite are setting competitive benchmarks, while strategic partnerships and global expansions indicate strong growth potential and attractive investment opportunities across automotive, aerospace, and renewable energy sectors.

Related Reports:

Europe Fiber Reinforced Plastic Recycling Market:

<https://www.maximizemarketresearch.com/market-report/europe-fiber-reinforced-plastic-recycling-market/281370/>

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MAXIMIZE MARKET RESEARCH PVT. LTD.

2nd Floor, Navale IT park Phase 3,  
Pune Bangalore Highway, Narhe  
Pune, Maharashtra 411041, India.  
+91 9607365656

sales@maximizemarketresearch.com

Lumawant Godage

MAXIMIZE MARKET RESEARCH PVT. LTD.

+ +91 96073 65656

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