Strategic Growth Opportunities in Global Composites Market

PRESENTED BY
Lucintel

DATE
May, 2021
Global Composites Market is expected to reach 38.9 billion by 2026 with CAGR of 5.2%

Trends and Forecast for the Global Composites Market (US $B) (2015-2026)

End Use Industry
- Transportation
- Marine
- Wind Energy
- Aerospace
- Pipe & Tank
- Construction

Fiber Type
- Glass Fiber
- Carbon Fiber
- Aramid Fiber

Manufacturing Process Type
- Hand Lay up
- Spray up
- Resin Infusion
- Pultrusion
- Prepreg Lay up

Opportunities for Global Composites by Various End Use Industry, Fiber, and Manufacturing Process

Top Companies of Fiber and Resin
- Owens Corning
- Jushi Group
- Nippon Electric
- Toray Industries
- Hexcel Corporation
Evolution: Composites Opportunities have Evolved through Number of Stages from Aerospace to Medical Applications

- In 1942, first structural aircraft parts were manufactured.
- In 1944, first prototype FRP boat hull was made.
- First glass fiber was used to manufacture FRP body for automotive in 1945.
- FRP first small diameter pipe, one piece shower stalls and underground FRP gasoline tank was introduced in the 1960s.
- CFRP was first used by Rolls Royce in their Jet Engines in the year 1967.
- In 1982, carbon composites were used first time in cargo door of Space Shuttle.
- In 1984, first carbon composites drive shaft was manufactured by Ford.
- In 1989s, Composites were commercially started using in liquefied petroleum gas cylinders.
- First composites cylinder, bumper, and fender was introduced between 1980-90s.
- First CFRP used in fishing rod in 1972.
- First CFRP used in Golf Clubs shafts in 1973.
- First carbon fiber was used in radio telescope in 1979.
- First large diameter FRP pipe and FRP tank for water and waste water and composites wind blade were manufactured between 1970-1980.
- First FRP window was installed in 1995.
- Automotive chassis, roof, trunk lid, radiator core supports were developed by carbon composites in between 2000-2010.
- Carbon composites first used in laptop cover in the year 2009.
- Carbon composites first used in MRI and X-ray Table after 2014.

Source: Lucintel
In This Market, Transportation is the Largest End Use Industry of Global Composites, whereas Glass Fiber is largest in Fiber Type

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### Global Composites Market by End Use

- Transportation
- Marine
- Wind Energy
- Aerospace
- Pipe and Tank
- Construction
- Electrical & Electronics
- Consumer Goods
- Others

### Global Composites Market by Fiber Type

- Glass Fiber
- Carbon Fiber
- Aramid Fiber

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<table>
<thead>
<tr>
<th>CAGR (2020-26)</th>
<th>Negative</th>
<th>Flat</th>
<th>Growing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;0%</td>
<td>0%-3%</td>
<td>&gt;3%</td>
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</tbody>
</table>

Source: Lucintel
Terms of Regions, APAC Provides the Largest Opportunity for Global Composites Followed by North America and Europe

Opportunities of Composites in following top countries are identified in this report:
- USA
- Mexico
- Canada
- United Kingdom
- German
- France
- Italy
- Spain
- South Korea
- Japan
- India
- China
- Saudi Arabia
- UAE

Source: Lucintel
Ecosystem of the Global Composites Market is Composed of Diverse Group of Companies

- **Raw Material Suppliers (Fiber and Resin)**
  - Owens Corning
  - Jushi
  - Toray
  - INEOS
  - Hexion
  - Reichhold
  - Hexcel
  - Solyndra
  - Celanese

- **Intermediate Material Supplier (SFT, LFT, GMT, Textile, and Others)**
  - Polymat
  - Hanwha
  - Idi
  - Reicchold
  - Hexcel
  - BASF
  - ‘Toray’
  - Sigtex
  - Celanese

- **Part Manufacturers**
  - Vestas
  - Magna
  - JW
  - Polytec Group
  - Toto
  - Continental Structural Plastics
  - Faurecia

- **End Use/ OEMs**
  - BMW
  - Boeing
  - Huawei
  - Samsung
  - Apple
  - Ford
  - LG
  - Siemens Gamesa

Source: Lucintel
Increasing Demand of Light Weight Material and Growth of Composites Material in Various End Use Industry are the Major Drivers in This Market

<table>
<thead>
<tr>
<th>Key Drivers</th>
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<tbody>
<tr>
<td><strong>Growing Demand of Light Weight Material</strong> : Composites offer significant weight saving potential as compared to competing materials such as steel and aluminum.</td>
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<tr>
<td><strong>Increasing Automotive Production and Growth in Aircraft Production</strong>: Increasing automotive production in US and Asia Pacific region and growth in Aircraft Production drives the demand of composites market.</td>
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<tr>
<td><strong>Increasing Construction Market</strong> : Increasing housing starts and remodeling actives in US, and Asia pacific region drives the composites market.</td>
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<table>
<thead>
<tr>
<th>Key Challenges</th>
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<tbody>
<tr>
<td><strong>Lack of Awareness</strong>: There has been lack of awareness of the benefits of composites structure in many of the industries.</td>
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<tr>
<td><strong>COVID-19 Impact</strong>: Coronavirus (COVID-19) is having a significant impact on businesses and the economy. Industry growth will witness negative impact in the Year 2020 due to manufacturing lockdown, and labour shortage. It is expected that market will recover from the year 2021.</td>
</tr>
</tbody>
</table>

Source: Lucintel
Penetration of Low Dielectric Glass Fiber in PCBs and Growing Initiative for Recycling of Carbon Fiber are some of Emerging Trends in the Global Composites Market.

Emerging Trends in Global Composites Market

**Trend A**
Emergence of Low Dielectric Glass Fiber for New Application

**Trend B**
Growing Initiative for Recycling of Carbon Fiber

**Trend C**
Production of Low Cost Carbon Fiber

Source: Lucintel
Developing Capabilities in Part Fabrication Technologies with low Cycle Time and Low Cost advance Fiber manufacturing Provide Strategic Growth Paths

**Strategic Considerations in Global Composites Market**

- Players of global composites market can focus to develop penetration of composites in new applications such as engine blade, cover, oil and gas, and medical applications.
- Increase in capabilities to manufacture composite materials to match up environmental concern and regulations.
- Investment to increase competencies to further reduce the cost of advance fiber such as carbon fiber and S-Glass.
- Research and development activities to focus on part fabrication technologies with low cycle times for cost effective mass production.

**Develop Capabilities**

- Alliances / In-organic Expansions
  - Strategic collaborations / acquisitions to increase geographical presence in growing countries like India, China, and Indonesia.
  - Develop alliances to penetrate in new applications.

*Source: Lucintel*
These Insights are Based on Below Market Report from Lucintel. It can help you Identify New Opportunities by Various Segments and Regions

Click for detail: https://www.lucintel.com/composites-market.aspx

Market Opportunities

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<tr>
<th>Year</th>
<th>Value (US $B)</th>
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<td>2014</td>
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<td>2015</td>
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<td>2016</td>
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<td>2024</td>
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<td>2025</td>
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Market Segment Analysis

- End Use
- Fibers
- Manufacturing Process
- Region

Regional Opportunities

- USA
- Canada
- Mexico
- UK
- Germany
- South Korea
- Japan
- China
- Others

Random Data

Market Share Analysis

- Player 1
- Player 2
- Player 3
- Player 4
- Player 5
- Others

Other Coverage in Report

- New Product Development
- Company Expansion
- Merger Acquisitions & JV
- Company Profiling

Note: These insights are based on recently launched Lucintel’s Report in the Global Composites Market, which has 350+ Page and over 150+ charts and tables. Lucintel also offers 10% free customization on above report based on your needs.

www.lucintel.com
Lucintel has an Extensive Toolkit to Address Strategic Questions

Key Questions

- Is market space / opportunity of current product offerings sufficiently robust?
- Market is focus for many: how can my company profitably differentiate?
- Based on our core skills, where should we focus?
- Should we build or buy? Is build even an option?
- What game changer actions exist and/or is a more incremental approach best?
- What is the order sequence of market entry segments / products?
Lucintel - At a Glance

• Premier management consulting and market research firm. Founded in 1998.
• Deep global insights into major industries. Team of over 120 analysts/consultants across globe
• Management comprised of PhDs, MBAs, and subject matter experts. Headquarter in Dallas, USA.

Conducted 500+ consulting projects across industries for 3M, Audi, Dupont, Carlyle, GE, etc.

Consulting Services

Why Lucintel


Clients we serve: Over 1000 clients from 70 countries – Fortune 500 companies

Strategic advice: Over 20 years of proven global strategic management consulting experience

Industries Served
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