

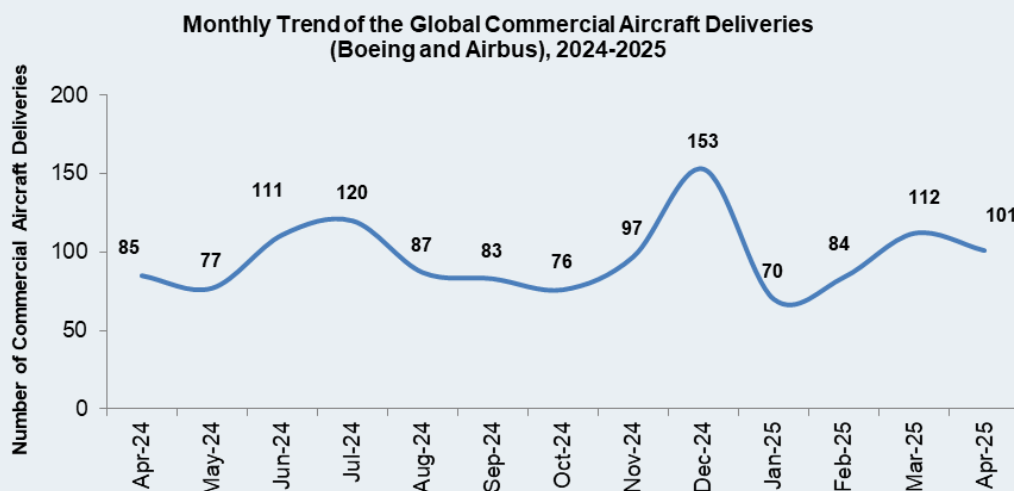
### Composites Market Update for April 2025

The composites material market has recently experienced some notable fluctuations across different sectors. Year-over-year comparisons for last month showed a general decline, with an overall market dip of approximately 10%, reflecting weaker conditions compared to the exceptionally strong performance in April of the previous year. Among the most impacted sectors, the construction business stood out with a significant reduction of around 18%. Seasonal segments, notably infrastructure-related projects, also reported a decrease of about 20%, influenced by project delays and cautious spending patterns.

On a month-to-month basis, the composites market remained relatively stable, experiencing only minor shifts from March to April. Looking forward, a slight improvement is expected heading into June. Inventory management has emerged as a critical trend, with companies actively reducing stock levels to minimize financial exposure, leading to demand for shorter lead times. Raw material prices saw downward trends, particularly for styrene and glycols, contributing to reduced input costs across the market, although minor fluctuations in materials, like maleic anhydride, introduced some variability. Overall, cautious optimism is apparent in certain segments, such as recreational vehicles, which are showing early signs of recovery.

### Aerospace

Commercial aircraft (Boeing and Airbus) deliveries decreased from 112 aircraft deliveries in March 2025 to 101 aircraft deliveries in April 2025.

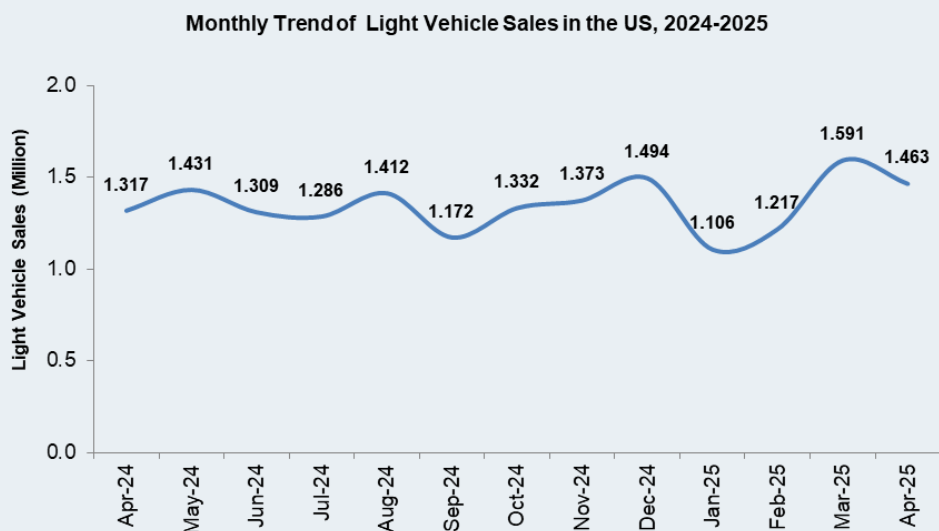


Some of the highlights of April 2025 are as follows:

- JetZero Announces Collins Aerospace Nacelles, New Campus and Use of Fiber Optic Sensors.** JetZero is an aviation startup that is developing a multiuse composite blended wing body (BWB) demonstrator aircraft in a \$235 million contract with the U.S. Air Force. This contract will advance this technology for a military tanker that could also be repurposed as a 250-260 passenger jet, possibly entering service in the early 2030s. JetZero has developed a digital thread design, in partnership with Siemens that includes fiber optic sensors embedded throughout the aircraft for monitoring its structures and systems.

### Automotive

The U.S. light vehicle sales of 1,463,379 units in April 2025 represented an increase of 11.1% as compared to 1,317,480 units in April 2024.



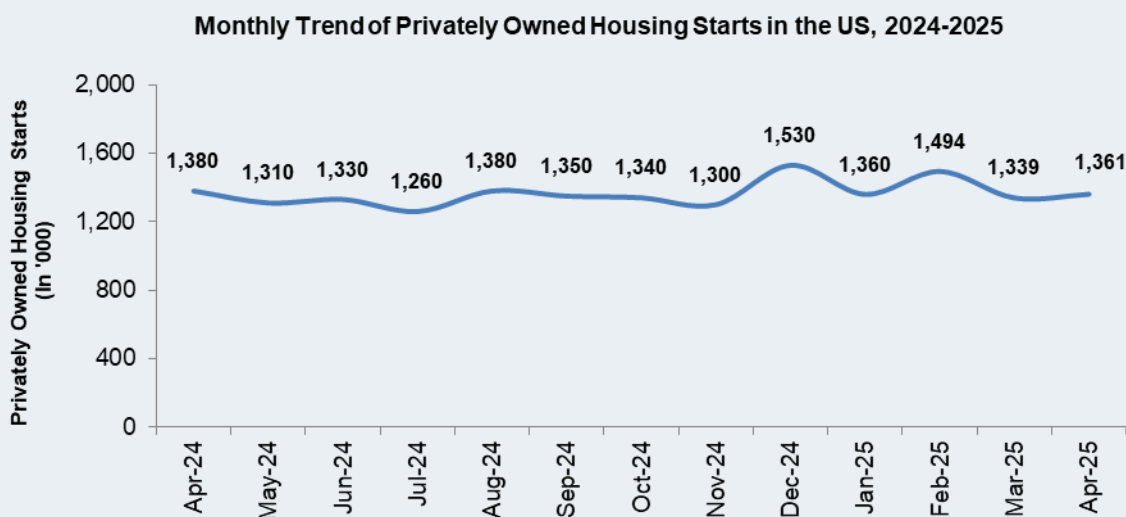
Some of the highlights of April 2025 are as follows:

- HTMS Advances CMC Strategy through LC3 Project, EV Battery Box Feasibility Studies.** High Temperature Material Systems, a company developing novel chemistries to deliver innovative ceramic matrix composites (CMC) in the U.K., has entered a partnership with Cranfield University to work on the Low Cost Carbon-Carbon Composites (LC3) project. The project team aims to streamline the manufacturing process, reducing waste and production time while maintaining mechanical performance. Moreover, the implications of this research extend beyond immediate cost savings. The project has the potential to foster greater sustainability in composites manufacturing by reducing material waste and energy consumption.

- Kia, Bcomp Bring Circular Composites to Concept EV2 Vehicle.** Bcomp has joined forces with Kia Corp., a subsidiary of the Hyundai Motor Group, to deploy ampliTex natural fiber composite materials for key interior components of the Concept EV2 electric vehicle (EV), demonstrating the potential for large-scale adoption of bio-based composites in affordable production vehicles. AmpliTex materials play a crucial role in the SUV's interior design, replacing conventional synthetic materials. Delivering lightweight and circularity by nature, Bcomp's solutions also offer end-of-life benefits, supporting a more environmentally conscious approach to automotive interior design, including recycling the components into composite pellets a new base material to serve a second life.

### Construction

Privately-owned housing starts in April were at a seasonally adjusted annual rate of 1,361,000. This is 1.6% above the revised March estimate of 1,339,000 but is 1.7% below the April 2024 rate of 1,385,000. Single-family housing starts in April were at a rate of 927,000; this is 2.1% below the revised March figure of 947,000. The April rate for units in buildings with five units or more was 420,000.



One of the highlights of April 2025 is as follows:

- Avient TPC Panels Support Resia Manufacturing Building Assembly.** Avient Corp. announces a successful collaboration with customer Resia, a vertically integrated real estate company that specializes in developing, building and managing multifamily communities. RM incorporates Avient's Hammerhead continuous glass fiber-reinforced thermoplastic composite panels into its interior wall systems in bathroom and kitchen modules. The large-format sandwich panels provide a lightweight structural solution that is faster to assemble than traditional stick-framed drywall or gypsum wall systems.

### Wind Energy

As per the most recent "Energy Infrastructure Update" released by the Office of Energy Projects within the Federal Energy Regulatory Commission, wind energy with the combined installed capacity of 1 unit in March 2025 amounted to 224 MW. Wind energy, with an aggregated generating capacity of 156.34 GW that contributes 11.79% to the total energy sources, amounted to 1,325.65 GW.

Some of the highlights of April 2025 are as follows:

- **EireComposites, University of Galway Launch R3WIND Project.** EireComposites Teo (Galway, Ireland), in collaboration with the University of Galway (Ireland) and supported by the Sustainable Energy Authority of Ireland (SEAI), announces the R3WIND (Repairable, Recyclable and Reusable) project, an initiative that will develop sustainable solutions for wind turbine blade manufacturing, repair and recycling. The R3WIND project builds on previous successful collaborations between EireComposites and the University of Galway and looks at new materials and processes to make wind energy more sustainable over the long term. It aims to develop novel solutions that will place Ireland at the cutting edge of the wind energy sector.
- **We4Ce Designs Rotor Blades for TouchWind's Floating One-Piece Rotor Turbine.** Rotor blade designer We4Ce has announced the design of 10 rotor blade sets for Dutch wind turbine startup TouchWind B.V. for testing on its floating TW6 turbine a self-tilting, one-piece rotor design that breaks from conventional three blade models. Engineered to withstand wind speeds of up to 250 kilometers/hour the highest wind class in wind industry standards the future commercial version is expected to cost significantly less than traditional turbines while delivering higher energy yields.

### Consumer Goods

New orders for manufactured durable goods in April, down following four consecutive monthly increases, decreased \$19.9 billion or 6.3% to \$296.3 billion. This followed a 7.6% March increase. Excluding transportation, new orders increased 0.2%. Excluding defense, new orders decreased 7.5%. Transportation equipment, also down following four consecutive monthly increases, drove the decrease, \$20.3 billion or 17.1% to \$98.8 billion.

Some of the highlights of April 2025 are as follows:

- **Carbitex, Blumaka Composite Insole Tackles Sport Injury Prevention.** Flexible carbon fiber composites company Carbitex Inc. has teamed up with performance insole brand Blumaka to create a dynamically flexible carbon fiber-plated insole to target prevention and relief for athletes suffering from a debilitating and career-threatening condition. The Blumaka Carbon Elite insole leverages Carbitex's GearFlex technology and Blumaka's Konnect ground reaction force (GRF) technology to address turf toe, an injury that involves a sprain of the ligaments around the big toe joint. The condition has been reported to occur in up to 45% of NFL players, though it is common in many high-impact field and court sports including lacrosse, baseball, soccer, basketball and others.

- **Bcomp, Siux Bring Natural Fiber Composites to Padel Tennis.** Bcomp Ltd. has collaborated with Spanish padel brand Siux Padel (Madrid) to develop the GEA racquet, an advanced-level padel integrating Bcomp's ampliTex natural fiber reinforcement. The delivery of enhanced precision provides better game control and playability to players of all levels while reducing environmental impact. Padel also known as padel tennis is currently one of the fastest-growing sports globally, with about 30 million active players in more than 140 countries around the world. Contributing to its popularity is its highly interactive and social nature, since it is generally played in doubles, making it accessible to people of all skill levels. Easy-to-use, stringless rackets made from composite materials with a perforated hitting surface is the main equipment used in this sport. Both companies believe that this exponential growth gives an opportunity to bring bio-based materials to the wider padel market.

### Recent Development in Material

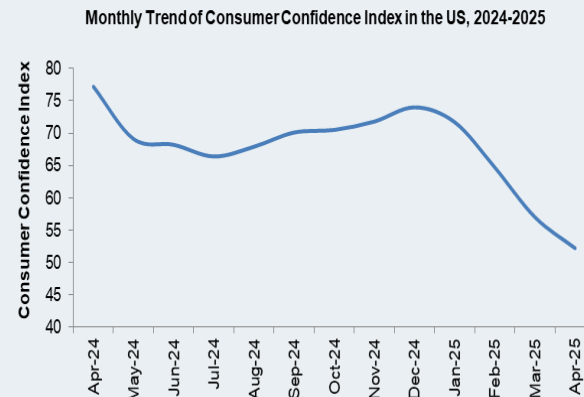
- **Wichita State Researchers Develop Stronger, Tougher, Lighter Composite Materials Using Helical Carbon Nanotubes Technology.** A research team at Wichita State University has developed a new nanocomposite material that could significantly enhance the strength, durability, multi-functionality and performance of lightweight structures used in aerospace, automotive, marine, wind turbine blades, oil and gas, biomedical and other high-demand industries. The new materials are currently being evaluated in collaboration with industry partners for use in aerospace structures and other high-performance applications. The innovation is protected by two patents related to the functionalization of helical nanotubes and the creation of interlocking nanocomposite structures. These patent-pending materials offer a scalable solution to one of the most persistent challenges in composite design weak interlaminar bonding. In addition, this new technology can be used to enhance the composite materials' properties in through-the-thickness direction and to improve the performance of bonded joints in composite assemblies, as well as improving the repair and healing of the damaged composite parts.

### The US Economic Overview – April 2025

The US Consumer Confidence Index decreased to 52.20 in April 2025 as compared to 57.0 in March 2025. The GDP at current price of the US increased from US \$30.06 trillion in March 2024 to US \$30.12 trillion in April 2025.

**Real gross domestic product (GDP)** decreased at an annual rate of 0.2% in the first quarter of 2025, according to the second estimate. In the fourth quarter of 2024, real GDP increased 2.4%. The decrease in real GDP in the first quarter primarily reflected an increase in imports, which are a subtraction in the calculation of GDP, and a decrease in government spending. These movements were partly offset by increases in investment, consumer spending, and exports.

The price index for gross domestic purchases increased 3.3% in the first quarter of 2025, revised down 0.1% from the previous estimate. The personal consumption expenditures (PCE) price index increased 3.6%, the same as previously estimated. Excluding food and energy prices, the PCE price index increased 3.4%, revised down 0.1% from the previous estimate.



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