

Future of Automotive Industry, Covers Original Equipment Manufacturer (OEM) Landscape, Connected Vehicles, Autonomous Driving Technologies, Electric Vehicles (Evs), Innovations In Battery Technology, Powertrains And Shared Mobility - Global Forecast 2030

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Abstracts

The automotive industry, encompassing PV, LCV, and MHCV, size is projected to grow from 88 million units in 2024 and is projected to hit 104 million units by 2030, at a CAGR of 2.4%. The automotive market is expected to experience growth driven by various factors. The automotive industry is currently under constant pressure to adapt to new changes due to technological advancements and end-user preferences. Adoption of electric vehicles is the key factor that has witnessed a rapid change in the automotive industry. In line with the EV sector, development and manufacturing of long-range batteries along with installation of fast and ultra-fast charging points for customers is the foremost agenda of the OEMs and EV solution providing companies.

Further, the introduction of autonomous cars with enhanced safety features and higher level of automation is shifting the trends in the automotive market. Moreover, OEMs are focused on reducing the production cost of the vehicle by using gigacasting technology and smart manufacturing by adopting automation and robotics while designing and manufacturing the components.

Furthermore, 5G connected cars to enhance driving experience, manage cars fleet, smart cities and cloud computing is catching on rapidly. It is estimated that around one-fifth of the connected cars will be integrated with 5G connectivity by the end of 2024. This technology is expected to develop quickly can penetrate the market at a high rate

by 2030.

Shared mobility encompasses a range of transportation services and resources that are utilized by multiple users, rather than owned individually. This concept includes car-sharing, bike-sharing, ride-hailing, and public transit. By promoting shared access over individual ownership, shared mobility seeks to reduce transportation costs, minimize environmental impact, and enhance urban mobility and accessibility. It offers a sustainable solution to the growing challenges of urbanization, such as traffic congestion and pollution, by optimizing the use of vehicles and infrastructure. Ultimately, shared mobility aims to create more efficient, equitable, and environmentally friendly transportation systems in cities worldwide.

“Autonomous vehicles are anticipated to witness significant growth.”

Autonomous vehicles are projected to grow significantly by 2030 due to the rising demand for safety, comfort, and driving convenience features. The launch of autonomous and semi-autonomous vehicles is another factor contributing to the market's expansion. Numerous OEMs are introducing Level 2, Level 3 and Level 4 autonomous vehicles, including Nissan, Honda, Audi, BMW, and Mercedes-Benz. For Instance, in July 2023, BMW announced to launch a 7 Series, Level 3 autonomous driving car by early 2024. Similarly, in February 2022, Benteler EV Systems, Beep and Mobileye announced a collaboration to develop a fully electric and autonomous (SAE Level 4) vehicle that can be used for commuters on public and private roads by early 2024.

“Asia Pacific holds the largest market share in the forecast period”

Asia Pacific has emerged as a promising market for the global automobile industry. The principal driver of this trend is the Chinese market, which has grown to become the world's largest producer and buyer of automobiles. India, Japan, and South Korea are also important country-level markets in the region. While India is gradually becoming a major contributor in the automotive sector, Japan and South Korea are already well-established. According to OICA, China and India produce over 30 million vehicles each year. Despite the worldwide market slowdown, the Asia region has seen growth in automobile production in 2022 and 2023. Continuing this trend, the Asia region will dominate the market in the forecast period.

Further, China is the most dominant nation in automotive industry with respect to supplying raw materials, manufacturing as well as its sales. China has the most

powerful supply chain of EV batteries. Over 50% of the EV batteries are manufactured in China. Moreover, around 75% of the components of EV batteries are manufactured in China. These Chinese manufacturers are looking to expand their services and acquire additional market share around the world. For instance, in September 2023, a leading Chinese EV battery manufacturer, Gotion, has announced to invest \$2 billion to setup EV lithium battery plant in Illinois, US. In addition, western automakers are adopting strategies in collaboration with Chinese players to manufacture batteries. For instance, in May 2023, Ford announced a collaboration with CATL to set up a EV battery plant in Michigan, US by investing \$3.5 billion, which will be operational by 2026.

Furthermore, the market growth in Asia Pacific can be attributed to the high vehicle production and increased use of advanced electronics in Japan, South Korea, and China. The governments of these countries have recognized the growth potential of the automotive sector and have consequently undertaken various initiatives to encourage major OEMs to enter their domestic markets. Several global automobile manufacturers, such as Volkswagen (Germany), Mercedes Benz (Germany), and General Motors (US), have shifted their production plants to emerging economies in the region.

Research Coverage:

The market analysis encompasses the Future of Automotive Industry, focusing on the sales volume of both passenger vehicles and commercial vehicles. Additionally, it examines the developments that occurred in the automotive industry till 2030. The report delves into the trends propelling the automotive sector, analyzing factors that influence the industry till 2030. The study encompasses a broad range, including Internal Combustion Engine (ICE) vehicles and Electric Vehicles (EVs), autonomous vehicles, 5G connectivity in cars, smart manufacturing, shared mobility, online sales of vehicles, powertrains, manufacturing platforms and others automotive related future technologies. Geographically, the report covers North America, Europe, Asia Pacific, and the Rest of the World.

Report Scope

The report will help the market leaders/new entrants in this market with information on the technologies that are predicted to drive the automotive industry in future. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key Trends in 2023 till 2030 (Electrification, Rise of 5G, Connected Cars, Smart Manufacturing etc).

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the automotive market

Market Development: Comprehensive information about lucrative markets – the report analyses the automotive market across varied regions

Market Diversification: Exhaustive information about diversification of supply chains, untapped geographies, recent developments, and investments in the automotive market

Competitive Assessment: Assessment of market shares, growth strategies and service offerings of leading players like across passenger and commercial vehicle segments which are then further divided into ICE and electric among others in the automotive market strategies. The report also helps stakeholders understand the pulse of the autonomous vehicle market and provides them information on key market drivers, challenges, and opportunities.

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