

Automotive Turbocharger Market by Diesel & Gasoline Turbo (VGT, Wastegate, e-Turbo), Material (Cast Iron, Al), Component (Turbine, Compressor, Housing), Off-Highway Equipment, Vehicle Type, Fuel Type, Aftermarket and Region - Global Forecast to 2028

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Report description:

The automotive turbocharger market is projected to grow from USD 15.0 billion in 2023 to USD 22.2 billion by 2028, at a CAGR of 8.1%. The Asia Pacific region is expected to be the largest market for automotive turbochargers. The growth can be attributed to the improving socio-economic conditions in emerging economies such as China, India, Indonesia, and Thailand. The increased vehicle production and upcoming stringent emission norms in China and India will boost the automotive turbocharger market in the Asia Pacific. Variable Geometry turbochargers are estimated to be the largest turbo technologies in the Asia Pacific region. In contrast, electric turbochargers will be the fastest-growing market in the coming years.

"Wastegate turbocharger is the highly adopted technology in Asia Pacific region for all diesel-based vehicles."

Diesel engines are popular in commercial vehicles owing to reasons such as higher fuel efficiency, energy, and torque than gasoline engines. The wastegate turbochargers are robust in construction and reliability. These are simpler in design than VGT turbochargers and cost less than wastegate turbochargers. Due to their simpler design, wastegate turbocharger turbines are spun by using this exhaust gas, which forces more air into the engine, creating high power and more torque in diesel engines, mostly used in heavy-duty vehicles. Lastly, the wastegate turbochargers offer more flexibility in case of aftermarket modifications. Considering all these factors, diesel vehicles in the Asia Pacific region are expected to be dominated by wastegate turbochargers. However, the VGTs are expected to grow faster in the region due to the benefits offered.

"The agricultural tractors will be the fastest growing turbochargers market in the off-highway application."

According to the World Bank, the current world population is 7.9 billion as of March 8, 2023, and the demand for agricultural tractors is increasing. The farm tractor market is projected to grow to ~USD 69 billion by 2027, at a CAGR of 5.0% over the

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forecast period. >130-250 HP tractors are expected to be the fastest-growing tractor segment during the forecast period globally. Europe is the largest market for this tractor segment due to the increasing traction of tractors with high-pulling power and the growing demand for commercial agriculture. The increasing popularity of commercial farming and new product launches by various major players are expected to boost the market in the region. With the increase in sales of high-HP tractors, the demand for turbochargers is also expected to grow. John Deere 9RX Series, New Holland T9 Series, and Kubota M7 Series are some examples of popular tractors equipped with turbochargers.

"Europe is the second largest market for automotive turbocharger market."

The UK, Germany & France are the largest three automotive turbocharger markets. To meet the international emission targets, the European Commission, European Council and European Parliament intend to reduce the CO2 emissions of new passenger cars by 15% by 2025 and 37.5% by 2030. These targets can be achieved by hybridization and electrification. However, due to supply chain and technology challenges faced by the electric vehicle industry, the EU countries are shifting their focus towards gasoline vehicles. As of 2022, the European Automobile Manufacturers' Association (ACEA) estimates that ~22% of European gasoline vehicles will be fitted with GDI systems and ~39% with turbochargers. With Europe shifting to gasoline vehicles and increasing vehicle hybridization, the region stands in second position for the automotive turbochargers demand.

The break-up of the profile of primary participants in the automotive turbocharger market:

-□By Company Type: Tier 1 - 70%, Tier 2 - 30 %

-□By Designation: C Level - 50%, Director Level - 20%, Others - 30%

-□By Region: North America - 15%, Europe - 15%, Asia Pacific - 70%.

Prominent companies include Garrett Motion Inc. (US), BorgWarner Inc. (US), Mitsubishi Heavy Industries (Japan), IHI Corporation (Japan), and Cummins Inc. (US) are the leading manufacturers of automotive turbochargers in the global market.

Research Coverage:

This research report categorizes the Automotive turbocharger market by vehicle type (passenger car, LCV, trucks, buses), fuel type (diesel, gasoline, alternate fuel), diesel by turbo type (VGT, Wastegate, E-turbo), gasoline by turbo type (VGT, Wastegate, E-turbo), gasoline by vehicle type (passenger car, LCV, trucks, buses), by material (cast iron, aluminum, others), by component (turbine, compressor, housing), off-highway by application (agricultural tractors, construction equipment), aftermarket by vehicle type (LCV, HCV), by region (Asia Pacific, North America, Europe, Rest of the World). The report's scope covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the automotive turbocharger market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; contracts, partnerships, agreements, new product & service launches, mergers and acquisitions, recession impact, and recent developments associated with the automotive turbocharger market. This report covers the competitive analysis of upcoming startups in the automotive turbocharger market ecosystem.

Reasons to buy this report:

The report will help the market leaders/new entrants with information on the closest approximations of the revenue numbers for the overall automotive turbocharger market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the market pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

-□Analysis of key drivers (Decrease in NOx emission limit in upcoming emission norms regulation, increase in demand for passenger cars with gasoline engines), restraints (High maintenance cost and more amount of cooling oil requirement and increase in adoption of electric vehicles), opportunities (Development of electric turbochargers), and challenges (Turbolag and durable, economical, and temperature resistance material requirement) are influencing the growth of the automotive turbocharger market.

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

-□Market Development: Comprehensive information about lucrative markets - the report analyses the automotive turbocharger market across varied regions.

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-□Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the automotive turbocharger market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like Garrett Motion Inc. (US), BorgWarner Inc. (US), Mitsubishi Heavy Industries (Japan), IHI Corporation (Japan), and Cummins Inc. (US) among others in the automotive turbocharger market.

The report also helps stakeholders understand the pulse of the automotive micro-mobility market & electric vehicle market by providing them with information on key market drivers, restraints, challenges, and opportunities.

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