

Automotive Emission Control Market Forecasts to 2032 – Global Analysis By Technology (Catalytic Converters, Particulate Filters, Selective Catalytic Reduction (SCR) Systems, Exhaust Gas Recirculation (EGR) Systems, Evaporative Emission Control (EVAP) Systems and Oxygen Sensors), Vehicle Type, Fuel Type, Sales Channel and By Geography

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Abstracts

According to Statistics MRC, the Global Automotive Emission Control Market is accounted for \$53.6 billion in 2025 and is expected to reach \$75.5 billion by 2032 growing at a CAGR of 5% during the forecast period. The methods and tactics employed to lessen the dangerous emissions that automobile engines emit are referred to as automotive emission control. It consists of selective catalytic reduction (SCR) systems, diesel particulate filters (DPF), exhaust gas recirculation (EGR), and catalytic converters. By reducing emissions of carbon monoxide (CO), nitrogen oxides (NOx), hydrocarbons (HC), and particulate matter (PM), these systems contribute to better air quality and environmental compliance.

According to S&P Global Mobility, global auto sales are forecasted to reach 89.6 million units in 2025.

Market Dynamics:

Driver:

Increasing environmental awareness

Growing environmental awareness is driving demand for emission control systems. Governments worldwide are implementing stricter regulations, such as Euro 7 and China VI, to reduce emissions. This regulatory push, combined with consumer preference for eco-friendly vehicles, fuels investment in advanced emission technologies. Furthermore, public campaigns and educational initiatives highlight the importance of sustainable transportation, encouraging manufacturers to innovate and comply with environmental standards.

Restraint:

Transition to electric vehicles (EVs)

The transition to electric vehicles poses a significant restraint on the automotive emission control market. EVs eliminate the need for traditional emission control systems, as they do not rely on internal combustion engines. This shift reduces demand for components like catalytic converters and diesel particulate filters. Moreover, the growth of the EV market, particularly in developed regions, challenges manufacturers to diversify into hybrid and alternative fuel-based emission control systems to maintain relevance.

Opportunity:

Development of hybrid vehicle emission control

Innovations such as compact catalytic converters and thermal management technologies are gaining traction to optimize hybrid efficiency. Moreover, automakers like Toyota and Honda are investing in hybrid-specific solutions to meet emission norms while extending electric range. Governments offering subsidies for hybrid adoption further amplify this demand. Companies developing adaptive systems for hybrids can tap into this niche, bridging the gap between conventional and fully electric markets.

Threat:

Changes in raw material prices

Fluctuating prices of precious metals like platinum, palladium, and rhodium critical for catalytic converters threaten market stability. Supply chain disruptions, geopolitical tensions, and mining bottlenecks exacerbate cost volatility, squeezing profit margins for manufacturers. Palladium prices surged by over 200% between 2018 and 2022,

straining production budgets. Additionally, automakers may seek alternatives, such as thrifting (reducing metal content) or adopting synthetic catalysts, risking performance compromises. This uncertainty complicates long-term planning and pricing strategies, particularly for smaller suppliers.

Covid-19 Impact:

The COVID-19 pandemic disrupted supply chains and manufacturing operations in the automotive emission control sector. Lockdowns halted production, while economic downturns delayed investments in new technologies. However, the pandemic also accelerated the shift towards sustainable and eco-friendly solutions, as governments and consumers increasingly prioritize environmental health.

The catalytic converters segment is expected to be the largest during the forecast period

The catalytic converters segment is expected to account for the largest market share during the forecast period, driven by their crucial role in reducing harmful emissions from internal combustion engines. These devices are essential for meeting stringent emission standards worldwide. Furthermore, advancements in catalytic converter technology, such as reducing platinum group metals usage, enhance their efficiency and appeal. As a result, catalytic converters will continue to be a vital component in emission control systems.

The aftermarket sales segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the aftermarket sales segment is predicted to witness the highest growth rate, driven by stringent periodic emission testing and aging vehicle fleets. As catalytic converters and particulate filters degrade over time, replacements become necessary to comply with regulations. Additionally, rising vehicle ownership in developing regions like Asia-Pacific and Latin America fuels demand. The proliferation of independent service centers and online part sales further boosts accessibility. With over 1.4 billion ICE vehicles globally, the aftermarket remains resilient even as EV adoption grows, ensuring sustained revenue streams for suppliers.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market

share, driven by high vehicle production in China, India, and Japan, coupled with stringent emission standards. China's China 6 norms and India's Bharat Stage VI regulations necessitate advanced catalytic converters and SCR systems. Additionally, rapid urbanization and expanding middle-class populations increase automotive sales. The region's robust manufacturing base and presence of key suppliers like Hyundai and Tata Motors further solidify its dominance. Government initiatives promoting cleaner air in megacities like Delhi and Beijing also accelerate adoption.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, fueled by rising vehicle ownership, economic growth, and tightening emission laws. Southeast Asian nations like Thailand and Indonesia are implementing Euro 4/5-equivalent standards, boosting demand for after-treatment systems. Moreover, expanding automotive aftermarkets and increasing environmental awareness in rural areas drive growth. Collaborative ventures between global OEMs and local manufacturers enhance technology transfer, while investments in hybrid vehicles create dual demand. These factors position Asia-Pacific as the epicenter of future growth potential.

Key players in the market

Some of the key players in Automotive Emission Control Market include Johnson Matthey, SGL Carbon, ElringKlinger, Hella, Mahle GmbH, Faurecia, Tenneco, BASF, Corning Incorporated, Umicore, NGK Insulators, Denso Corporation, Continental AG, BorgWarner, Eberspacher, Delphi Technologies, Cummins Inc. and Robert Bosch GmbH.

Key Developments:

In December 2021, Tenneco is putting its 100-plus years of powertrain expertise in improving vehicle fuel efficiency and reducing emissions to work to explore synthetic fuels (e-fuels), a viable near-term solution to further maximize the efficiency and minimize the carbon footprint of internal combustion engines (ICE). Tenneco's Powertrain business group is partnering with key academic and industry experts to examine the technical possibilities and commercial feasibility of synthetic fuels as a key technology to help the industry transition to climate-neutral transportation. This collaborative effort is referred to as the NAMOSYN project.

In July 2021, BASF to carve out mobile emissions catalysts business and invest up to €4.5 billion in battery materials and recycling. As the largest chemicals supplier to the automotive industry, BASF will further strengthen its focus on battery materials and recycling and will establish a separate mobile emissions catalysts, automotive catalysts recycling and associated precious metal services entity. The new entity will be named BASF Automotive Catalysts and Recycling.

Technologies Covered:

Catalytic Converters

Particulate Filters

Selective Catalytic Reduction (SCR) Systems

Exhaust Gas Recirculation (EGR) Systems

Evaporative Emission Control (EVAP) Systems

Oxygen Sensors

Vehicles Types Covered:

Passenger Cars

Commercial Vehicles

Fuels Types Covered:

Gasoline

Diesel

Alternative Fuels

Sales Channels Covered:

OEM Installations

Aftermarket Sales

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments

- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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