

Emission Control Catalysts Market by Type (Palladium, Platinum, Rhodium), Application (Mobile sources (off road, and on road), and Stationary Sources), and Region (North America, Europe, APAC, South America & RoW) - Global Forecast to 2026

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Abstracts

The emission control catalysts (ECC) market size is estimated at USD 42.9 billion in 2021 and is projected to reach USD 59.8 billion by 2026, at a CAGR of 6.9% during the forecast period. The market is driven by various factors, such as increase in the use of automotive diesel engines, and stringent emission regulations from the government. However, dependence of performance on temperature and loss of activity through poisoning and thermal deactivation can restrain the growth of the market.

Increase usage of gasoline engines leads to growing demand of palladium in catalytic converter.

Palladium is one of the metals from the PGM group that dominates the catalytic converter technology. Palladium is used as an oxidation catalyst which is widely used in gasoline autocatalyst (petrol based engines) the in diesel engines. Palladium is not suitable for diesel-based autocatalyst because the fuel has high level of Sulphur content, which sticks to palladium but not platinum.

Stringent emission regulations in mobile sources to grow the demand for ECC

The mobile industry is the largest market for PGM based on ECC. The ECC market is derived further dividing the market into on road, and off road. Stringent emission regulations, and increasing pollution have increased the demand for ECC market.

APAC is expected to register the highest growth during the forecast period.

APAC is expected to register the highest growth during the forecast period. Increasing population, growing industrialization, strict government norms, and environmental regulations are the key factors attributed to the overall growth of the market in the region. The increasing developments in the automotive industries in emerging countries of the region are providing huge growth opportunities for the ECC market.

In-depth interviews were conducted with chief executive officers (CEOs), marketing directors, other innovation and technology directors, and executives from various key organizations operating in the ECC market.

By Company Type - Tier 1: 60%, Tier 2: 30%, and Tier 3: 10%

By Designation - D Level: 30%, C Level: 30%, Others: 40%

By Region – Europe: 37%, APAC: 27%, North America: 18%, South America: 9%, RoW: 9%

The ECC market comprises major players such as BASF catalyst (Germany), Johnson Matthey (UK), Umicore (Belgium), Tenneco (US), Cataler (Japan), Heraeus holding (Germany), Bosal (Netherlands), Clean Diesel Technologies (US), Comertech (US), DCL International Inc. (Canada), Hitachi Zosen Corporation (Japan), IBDIEN (Austria), Interkat (Germany), Kunming Sino-Platinum Metals Catalyst (China), Nett Technologies (Japan), NGK Insulators (Japan), Shell Global (Netherlands), Sinocat (China), and Zelolyst International (US). The study includes in-depth competitive analysis of these key players in the ECC market, with their company profiles, recent developments, and key market strategies.

Research Coverage:

The market study covers the ECC market and its segments. It aims at estimating the market size and the growth potential of this market across different segments such as metal type, application, catalytic converter, and region. The study also includes an in-depth competitive analysis of the key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

Key Benefits of Buying the Report:

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall ECC market and the sub-segments. The stakeholders will be able to understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market strategies. It will also help stakeholders comprehend the pulse of the market and provide them with information on key market drivers, restraints, and opportunities.

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About

The report covers PGMs and other metals that are used as catalysts to control emissions from automotive, industrial processing units, marine, locomotive, and other industries. The emission control catalysts reduce the harmful pollutants such as NO_x, hydrocarbons, CO, and other particulate matter from polluting the environment. These catalysts help to reduce or oxidize the harmful pollutants to less harmful pollutants such as CO₂, H₂O and nitrogen. Catalytic converters are installed in automobiles where the reduction and oxidation of harmful pollutants takes place. Other metal catalysts are used in industrial processing units to control harmful emissions such as NO_x and CO₂.

Objectives:

To define, describe, and forecast the global emission control catalyst market on the basis of type and application.

To provide detailed information about the major factors influencing the growth of the market (drivers, restraints, opportunities, industry specific challenges, and winning imperatives).

To strategically analyze the market segments with respect to individual growth trends, future prospects, and contribution to the total market.

To analyze the opportunities in the market for stakeholders and details of a competitive landscape for the market leaders.

To forecast the value of market segments with respect to four major regions (along with the countries), namely North America, Europe (including Russia), Asia-Pacific, and Rest of the World (RoW).

To strategically profile key players and their core competencies in the market.

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