

# **Silicon Carbide (SiC) Market Size, Share & Trends Analysis Report By Product (Black SiC, Green SiC), By End Use (Steel & Energy, Automotive, Aerospace & Aviation), And Segment Forecasts, 2012 - 2020**

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## **Abstracts**

The global silicon carbide market size is expected to reach USD 4.48 billion by 2020, according to a new report by Grand View Research, Inc., registering a CAGR of 16.1% during the forecast period. Growing automotive, semiconductor, and aerospace industries are key drivers for market growth.

Increasing use of silicon carbide (SiC) in military applications is expected to boost demand over the forecast period. Regulatory amendments such as the U.S. Defense Protection Act for advancement and establishment of SiC for use in military operations will also benefit the market. In addition, increasing use of carbon fiber reinforced silicon carbide in disc brakes is expected to propel its demand in the automotive sector.

The European Commission's announcement of USD 122.1 billion investment for development of semiconductors is expected to facilitate many investors to invest in the manufacturing of semiconductors. Therefore, demand for SiC is expected to grow in semiconductor applications as well.

The Chinese government's restriction on export of silicon as a raw material is expected to tighten the supply of silicon as a raw material for the manufacturing of silicon carbide in other countries. This tightened supply is expected to be compensated by surging domestic production of silicon in various countries such as U.S., France, Norway, and Brazil. Domestic availability of raw material in these countries is expected to ensure continuous supply of silicon for production of SiC.

Silicon carbide is used as a raw material for refractories on account of its high temperature resistance. These refractory materials are used in linings of furnaces, kilns, furnaces, and reactors, which cater to numerous industries such as aluminum, steel, cast iron, and metal. Surging demand from the metal and cement industry is expected to drive the market.

Further key findings from the report suggest:

In terms of revenue, the black silicon carbide segment is anticipated to reach USD 2.56 billion by 2020. Green silicon, on the other hand, is projected to expand at a CAGR of 16.0% over the forecast period

Steel and energy dominated the global silicon carbide market in terms of application, with a global share of 23.6% in 2013

The North America SiC market is anticipated to exceed 290.2 kilo tons by 2020, Asia Pacific, especially India and China, is also expected to witness remarkable growth over the forecast period

RoW is projected to exhibit a CAGR of 15.8% over the forecast period, owing to rapid developments in the medical and healthcare and automotive sectors

Some of the key companies in the market are AGSCO Corporation; Carborundum Universal Ltd.; Dow Chemical Co.; Entegris Inc.; ESD-SiC b.v.; ESK-SiC GmbH; Gaddis Engineered Materials; Grindwell Norton Ltd.; Saint-Gobain Ceramics Materials GmbH; and Snam Abrasives Pvt. Ltd.

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