

# Global Hybrid and Electric Vehicle Fans & Blowers Market - BEV, HEV and PHEV

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## Abstracts

Hybrid electric vehicles, plug-in hybrid electric vehicles and battery electric vehicles employ the same kind of engine cooling and HVAC components as their conventional counterparts such as fans and blowers. Though there is no combustion engine in the battery electric vehicle, cooling modules are used to cool the radiators/condensers for electric drive cooling, air conditioning, battery cooling and power control module cooling. Apart from the vehicle HVAC systems, blowers are also employed in hybrid and electric vehicle batteries. Since these batteries operate at high voltages and generate excess heat during the operation, need to be cooled down in order to increase their life and performance. Most of the hybrid and electric vehicles are adopting brushless DC fans to increase the range with a single charge as BLDC fans consume less energy and weigh less. This phenomenon is currently high in battery electric vehicles and plug-in hybrid electric vehicles while the hybrid electric vehicles predominantly using brushed DC fans.

The production of hybrid and electric vehicles, globally, is slated to register a considerably faster CAGR of 21.9% and reach a projected 6.6 million units by 2020 from an estimated 2.4 million units in 2015. The penetration level of hybrid and electric vehicles among overall light vehicles production is likely to increase from an estimated 2.8% in 2015 (of 86 million units) to a projected 6.4% in 2020 (of 103 million). Worldwide, consumption of fans & blowers in hybrid and electric vehicles is estimated at 9.2 million units in 2015 and further expected to reach 24.8 million units by 2020 at a CAGR of 21.3% between 2014 and 2020. In terms of value, global demand for Fans & Blowers in Hybrid and Electric Vehicles is likely to register a robust 21% CAGR over the same period and to US\$3.8 billion by 2020.

Global hybrid and electric vehicle fans & blowers segments analyzed in this study include engine cooling fans, HVAC blowers and battery cooling blowers. The report

reviews, analyses and projects the Hybrid and Electric Vehicle Fans & Blowers market for the global and regional markets including Asia-Pacific, Europe and North America. The regional markets further analyzed for 15 independent countries across North America – Canada, Mexico and The United States; Europe – Finland, France, Germany, Italy, Spain, Sweden, Turkey and The United Kingdom; and Asia-Pacific –China, Japan, South Korea and Malaysia.

This 330 page market research report includes 258 charts (includes a data table and graphical representation for each chart), supported with meaningful and easy to understand graphical presentation, of market numbers. The statistical tables represent the data for the global hybrid and electric vehicle fans & blowers market value in USD and volumes in units by geographic region and product segment. The report profiles 16 key global players offering thermal systems and components for global hybrid and electric vehicle industry. The research also provides the listing of the companies engaged in manufacturing and supply of hybrid and electric vehicle engine cooling fan modules, fans, HVAC systems and blowers. The global list of companies covers addresses, contact numbers and the website addresses of 277 companies including subsidiaries.

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Air International Thermal Systems

Amotech Co., Ltd.

Brose Fahrzeugteile GmbH & Co KG

Calsonic Kansei Corporation

Delta Electronics, Inc.

Denso Corporation

Doowon Climate Control Co Ltd

EBM-PAPST Group

Hanon Systems Corp. Formerly Halla Visteon Climate Control Corp.

Johnson Electric Group

MAHLE Behr GmbH & Co. KG

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Sanden Holding Corporation

SPAL Automotive Srl

Sunonwealth Electric Machine Industry Co Ltd

Valeo SA

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