

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

<https://marketpublishers.com/r/G8697E5A092EN.html>

Date: November 2015

Pages: 330

Price: US\$ 3,960.00 (Single User License)

ID: G8697E5A092EN

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.

Contents

PART A: GLOBAL MARKET PERSPECTIVE

1. INTRODUCTION

1.1 Product Outline

1.1.1 Automotive/Transportation Applications for Fans & Blowers

1.1.2 Fans

1.1.2.1 Electric Fans

1.1.2.1.1 Electric Fan Motor Types

1.1.2.1.1.1 Brushless DC (BLDC) Motor

1.1.2.1.1.2 Brushed DC Motor

1.1.3 Blowers

1.1.4 Hybrid & Electric Vehicle Fans & Blowers

1.1.4.1 Engine Cooling Fans

1.1.4.2 HVAC Blowers

1.1.4.3 Battery Cooling Blowers

1.1.4.3.1 Air Cooling

1.1.4.3.2 Liquid Cooling

2. KEY GLOBAL PLAYERS

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

Mitsubishi Heavy Industries Ltd

Sanden Holding Corporation

SPAL Automotive Srl

Sunonwealth Electric Machine Industry Co Ltd

Valeo SA

3. GLOBAL MARKET OVERVIEW

3.1 Hybrid and Electric Vehicle Production Overview

3.1.1 Hybrid and Electric Vehicle Production Overview by Vehicle Type

Global Leading Manufacturers (OEMs) of Hybrid and Electric Vehicles

3.1.1.1 Battery Electric Vehicle (BEV) Production by Geographic Region

3.1.1.2 Hybrid Electric Vehicle (HEV) Production by Geographic Region

3.1.1.3 Plug-in Hybrid Electric Vehicle (PHEV) Production by Geographic Region

3.2 Hybrid and Electric Vehicle Fans & Blowers Market Overview

3.2.1 Hybrid and Electric Vehicle Fans & Blowers Market Overview by Type

3.2.1.1 Hybrid and Electric Vehicle Engine Cooling Fans Market Overview

3.2.1.1.1 Hybrid and Electric Vehicle Engine Cooling Fans Market Overview by Geographic Region

3.2.1.1.2 Hybrid and Electric Vehicle Engine Cooling Fans Market Overview by Vehicle Type

3.2.1.1.2.1 Battery Electric Vehicle (BEV) Engine Cooling Fans Market Overview by Geographic Region

3.2.1.1.2.2 Hybrid Electric Vehicle (HEV) Engine Cooling Fans Market Overview by Geographic Region

3.2.1.1.2.3 Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Fans Market Overview by Geographic Region

3.2.1.2 Hybrid and Electric Vehicle HVAC Blowers Market Overview

3.2.1.2.1 Hybrid and Electric Vehicle HVAC Blowers Market Overview by Geographic Region

3.2.1.2.2 Hybrid and Electric Vehicle HVAC Blowers Market Overview by Vehicle Type

3.2.1.2.2.1 Battery Electric Vehicle (BEV) HVAC Blowers Market Overview by Geographic Region

3.2.1.2.2.2 Hybrid Electric Vehicle (HEV) HVAC Blowers Market Overview by Geographic Region

3.2.1.2.2.3 Plug-in Hybrid Electric Vehicle (PHEV) HVAC Blowers Market Overview by Geographic Region

3.2.1.3 Hybrid and Electric Vehicle Battery Cooling Blowers Market Overview

3.2.1.3.1 Hybrid and Electric Vehicle Battery Cooling Blowers Market Overview by Geographic Region

3.2.1.3.2 Hybrid and Electric Vehicle Battery Cooling Blowers Market Overview by Vehicle Type

3.2.1.3.2.1 Battery Electric Vehicle (BEV) Battery Cooling Blowers Market

Overview by Geographic Region

3.2.1.3.2.2 Hybrid Electric Vehicle (HEV) Battery Cooling Blowers Market Overview
by Geographic Region

3.2.1.3.2.3 Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Blowers Market
Overview by Geographic Region

PART B: REGIONAL MARKET PERSPECTIVE

Hybrid and Electric Vehicle Production by Geographic Region

Hybrid and Electric Vehicle Fans & Blowers Market Overview by Geographic Region

REGIONAL MARKET OVERVIEW

1. NORTH AMERICA

1.1 Hybrid and Electric Vehicle Production Overview

1.1.1 Hybrid and Electric Vehicle Production Overview by Country

North American Leading Manufacturers (OEMs) of Hybrid and Electric Vehicles

1.1.1.1 Battery Electric Vehicle (BEV) Production Overview by Country

1.1.1.2 Hybrid Electric Vehicle (HEV) Production Overview by Country

1.1.1.3 Plug-in Hybrid Electric Vehicle (PHEV) Production Overview by Country

1.2 Hybrid and Electric Vehicle Fans & Blowers Market Overview

1.2.1 Hybrid and Electric Vehicle Fans & Blowers Market Overview by Type

1.2.1.1 Hybrid and Electric Vehicle Engine Cooling Fans Market Overview by Country

1.2.1.1.1 Battery Electric Vehicle (BEV) Engine Cooling Fans Market Overview by
Country

1.2.1.1.2 Hybrid Electric Vehicle (HEV) Engine Cooling Fans Market Overview by
Country

1.2.1.1.3 Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Fans Overview by
Country

1.2.1.2 Hybrid and Electric Vehicle HVAC Blowers Market Overview by Country

1.2.1.2.1 Battery Electric Vehicle (BEV) HVAC Blowers Market Overview by Country

1.2.1.2.2 Hybrid Electric Vehicle (HEV) HVAC Blowers Market Overview by Country

1.2.1.2.3 Plug-in Hybrid Electric Vehicle (PHEV) HVAC Blowers Market Overview by
Country

1.2.1.3 Hybrid and Electric Vehicle Battery Cooling Blowers Market Overview by
Country

1.2.1.3.1 Battery Electric Vehicle (BEV) Battery Cooling Blowers Market Overview
by Country

- 1.2.1.3.2 Hybrid Electric Vehicle (HEV) Battery Cooling Blowers Market by Country
- 1.2.1.3.3 Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Blowers Market Overview by Country

2. EUROPE

2.1 Hybrid and Electric Vehicle Production Overview

2.1.1 Hybrid and Electric Vehicle Production Overview by Country

European Leading Manufacturers (OEMs) of Hybrid and Electric Vehicles

2.1.1.1 Battery Electric Vehicle (BEV) Production Overview by Country

2.1.1.2 Hybrid Electric Vehicle (HEV) Production Overview by Country

2.1.1.3 Plug-in Hybrid Electric Vehicle (PHEV) Production Overview by Country

2.2 Hybrid and Electric Vehicle Fans & Blowers Market Overview

2.2.1 Hybrid and Electric Vehicle Fans & Blowers Market Overview by Type

2.2.1.1 Hybrid and Electric Vehicle Engine Cooling Fans Market Overview by Country

Country

Country

Country

2.2.1.2 Hybrid and Electric Vehicle HVAC Blowers Market Overview by Country

2.2.1.2.1 Battery Electric Vehicle (BEV) HVAC Blowers Market Overview by Country

2.2.1.2.2 Hybrid Electric Vehicle (HEV) HVAC Blowers Market Overview by Country

Country

Country

by Country

2.2.1.3.2 Hybrid Electric Vehicle (HEV) Battery Cooling Blowers Market by Country

3. ASIA-PACIFIC

3.1 Hybrid and Electric Vehicle Production Overview

3.1.1 Hybrid and Electric Vehicle Production Overview by Country

Asia-Pacific Leading Manufacturers (OEMs) of Hybrid and Electric Vehicles

3.1.1.1 Battery Electric Vehicle (BEV) Production Overview by Country

3.1.1.2 Hybrid Electric Vehicle (HEV) Production Overview by Country

- 3.1.1.3 Plug-in Hybrid Electric Vehicle (PHEV) Production Overview by Country
- 3.2 Hybrid and Electric Vehicle Fans & Blowers Market Overview
 - 3.2.1 Hybrid and Electric Vehicle Fans & Blowers Market Overview by Type
 - 3.2.1.1 Hybrid and Electric Vehicle Engine Cooling Fans Market Overview by Country
 - 3.2.1.1.1 Battery Electric Vehicle (BEV) Engine Cooling Fans Market Overview by Country
 - 3.2.1.1.2 Hybrid Electric Vehicle (HEV) Engine Cooling Fans Market Overview by Country
 - 3.2.1.1.3 Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Fans Overview by Country
 - 3.2.1.2 Hybrid and Electric Vehicle HVAC Blowers Market Overview by Country
 - 3.2.1.2.1 Battery Electric Vehicle (BEV) HVAC Blowers Market Overview by Country
 - 3.2.1.2.2 Hybrid Electric Vehicle (HEV) HVAC Blowers Market Overview by Country
 - 3.2.1.2.3 Plug-in Hybrid Electric Vehicle (PHEV) HVAC Blowers Market Overview by Country
 - 3.2.1.3 Hybrid and Electric Vehicle Battery Cooling Blowers Market Overview by Country
 - 3.2.1.3.1 Battery Electric Vehicle (BEV) Battery Cooling Blowers Market Overview by Country
 - 3.2.1.3.2 Hybrid Electric Vehicle (HEV) Battery Cooling Blowers Market by Country
 - 3.2.1.3.3 Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Blowers Market Overview by Country

PART C: GUIDE TO THE INDUSTRY

1. NORTH AMERICA

2. EUROPE

3. ASIA-PACIFIC

4. REST OF WORLD

PART D: ANNEXURE

1. RESEARCH METHODOLOGY

2. FEEDBACK

CHARTS & GRAPHS

PART A: GLOBAL MARKET PERSPECTIVE

Chart 1: Global Hybrid and Electric Vehicle Production (2011-2020) in Units

Chart 2: Global Hybrid and Electric Vehicle Production (2011-2020) by Vehicle Type – BEV, HEV and PHEV in Units

Chart 3: Glance at 2011, 2015 and 2020 Global Hybrid and Electric Vehicle Production Share (%) by Vehicle Type – BEV, HEV and PHEV

Chart 4: Global Battery Electric Vehicle (BEV) Production (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in Units

Chart 5: Glance at 2011, 2015 and 2020 Global Battery Electric Vehicle (BEV) Production Share (%) by Geographic Region – North America, Europe and Asia-Pacific

Chart 6: Global Hybrid Electric Vehicle (HEV) Production (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in Units

Chart 7: Glance at 2011, 2015 and 2020 Global Hybrid Electric Vehicle (HEV) Production Share (%) by Geographic Region – North America, Europe and Asia-Pacific

Chart 8: Global Plug-in Hybrid Electric Vehicle (PHEV) Production (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in Units

Chart 9: Glance at 2011, 2015 and 2020 Global Plug-in Hybrid Electric Vehicle (PHEV) Production Share (%) by Geographic Region – North America, Europe and Asia-Pacific

Chart 10: Global Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) in Volume ('000 Units) and Value (USD Million)

Chart 11: Global Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in '000 Units

Chart 12: Glance at 2011, 2015 and 2020 Global Fans & Blowers in Hybrid and Electric Vehicles Volume Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 13: Global Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in USD Million

Chart 14: Glance at 2011, 2015 and 2020 Global Fans & Blowers in Hybrid and Electric Vehicles Value Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 15: Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) in Volume ('000 Units) and Value (USD Million)

Chart 16: Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific

in '000 Units

Chart 17: Glance at 2011, 2015 and 2020 Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 18: Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 19: Glance at 2011, 2015 and 2020 Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 20: Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Vehicle Type – BEV, HEV and PHEV in '000 Units

Chart 21: Glance at 2011, 2015 and 2020 Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Volume Market Share (%) Analysis by Vehicle Type – BEV, HEV and PHEV

Chart 22: Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Vehicle Type – BEV, HEV and PHEV in USD Million

Chart 23: Glance at 2011, 2015 and 2020 Global Electric Fans in Hybrid and Electric Vehicle Engine Cooling Value Market Share (%) Analysis by Vehicle Type – BEV, HEV and PHEV

Chart 24: Global Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 25: Glance at 2011, 2015 and 2020 Global Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 26: Global Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 27: Glance at 2011, 2015 and 2020 Global Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 28: Global Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 29: Glance at 2011, 2015 and 2020 Global Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 30: Global Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market

Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 31: Glance at 2011, 2015 and 2020 Global Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 32: Global Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 33: Glance at 2011, 2015 and 2020 Global Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 34: Global Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 35: Glance at 2011, 2015 and 2020 Global Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 36: Global Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) in Volume ('000 Units) and Value (USD Million)

Chart 37: Global Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 38: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle HVAC Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 39: Global Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 40: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle HVAC Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 41: Global Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Vehicle Type – BEV, HEV and PHEV in '000 Units

Chart 42: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle HVAC Volume Market Share (%) Analysis by Vehicle Type – BEV, HEV and PHEV

Chart 43: Global Blowers in Hybrid and Electric Vehicle HVAC by Vehicle Type – BEV, HEV and PHEV Market Analysis (2011-2020) in USD Million

Chart 44: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle HVAC Value Market Share (%) Analysis by Vehicle Type – BEV, HEV and PHEV

Chart 45: Global Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 46: Glance at 2011, 2015 and 2020 Global Blowers in Battery Electric Vehicle (BEV) HVAC Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 47: Global Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 48: Glance at 2011, 2015 and 2020 Global Blowers in Battery Electric Vehicle (BEV) HVAC Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 49: Global Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 50: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid Electric Vehicle (HEV) HVAC Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 51: Global Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 52: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid Electric Vehicle (HEV) HVAC Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 53: Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 54: Glance at 2011, 2015 and 2020 Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 55: Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 56: Glance at 2011, 2015 and 2020 Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 57: Global Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) in Volume ('000 Units) and Value (USD Million)

Chart 58: Global Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis

(2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 59: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle Battery Cooling Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 60: Global Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 61: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle Battery Cooling Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 62: Global Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Vehicle Type – BEV, HEV and PHEV in '000 Units

Chart 63: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle Battery Cooling Volume Market Share (%) Analysis by Vehicle Type – BEV, HEV and PHEV

Chart 64: Global Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Vehicle Type – BEV, HEV and PHEV in USD Million

Chart 65: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid and Electric Vehicle Battery Cooling Value Market Share (%) Analysis by Vehicle Type – BEV, HEV and PHEV

Chart 66: Global Blowers in Battery Electric Vehicle (BEV) Battery Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 67: Glance at 2011, 2015 and 2020 Global Blowers in Battery Electric Vehicle (BEV) Battery Cooling Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 68: Global Blowers in Battery Electric Vehicle (BEV) Battery Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 69: Glance at 2011, 2015 and 2020 Global Blowers in Battery Electric Vehicle (BEV) Battery Cooling Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 70: Global Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 71: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Volume Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 72: Global Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 73: Glance at 2011, 2015 and 2020 Global Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Value Market Share (%) Analysis by Geographic Region – North America, Europe and Asia-Pacific

Chart 74: Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Market Analysis (2011-2020) by Geographic Region – North America and Asia-Pacific in '000 Units

Chart 75: Glance at 2011, 2015 and 2020 Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Volume Market Share (%) Analysis by Geographic Region – North America and Asia-Pacific

Chart 76: Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Market Analysis (2011-2020) by Geographic Region – North America and Asia-Pacific in USD Million

Chart 77: Glance at 2011, 2015 and 2020 Global Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Value Market Share (%) Analysis by Geographic Region – North America and Asia-Pacific

PART B: REGIONAL MARKET PERSPECTIVE

Chart 78: Global Hybrid and Electric Vehicle Production (2011-2020) by Geographic Region – North America, Europe and Asia-Pacific in Units

Chart 79: Glance at 2011, 2015 and 2020 Global Hybrid and Electric Vehicle Production Share (%) by Geographic Region – North America, Europe and Asia-Pacific

Chart 80: Global Market Analysis (2011-2020) for Fans & Blowers in Hybrid & Electric Vehicles by Geographic Region – North America, Europe and Asia-Pacific in '000 Units

Chart 81: Glance at 2011, 2015 and 2020 Global Volume Market Share (%) Analysis for Fans & Blowers in Hybrid & Electric Vehicles by Geographic Region – North America, Europe and Asia-Pacific

Chart 82: Global Market Analysis (2011-2020) for Fans & Blowers in Hybrid & Electric Vehicles by Geographic Region – North America, Europe and Asia-Pacific in USD Million

Chart 83: Glance at 2011, 2015 and 2020 Global Value Market Share (%) Analysis for Fans & Blowers in Hybrid & Electric Vehicles by Geographic Region – North America, Europe and Asia-Pacific

REGIONAL MARKET OVERVIEW

NORTH AMERICA

Chart 84: North American Hybrid and Electric Vehicle Production (2011-2020) by Vehicle Type – BEV, HEV and PHEV in Units

Chart 85: Glance at 2011, 2015 and 2020 North American Hybrid and Electric Vehicle Production Share (%) by Vehicle Type – BEV, HEV and PHEV

Chart 86: North American Hybrid and Electric Vehicle Production (2011-2020) by Country – Canada, Mexico and United States in Units

Chart 87: Glance at 2011, 2015 and 2020 North American Hybrid and Electric Vehicle Production Share (%) by Country – Canada, Mexico and United States

Chart 88: North American Battery Electric Vehicle (BEV) Production (2011-2020) by Country – Canada, Mexico and United States

Chart 89: Glance at 2011, 2015 and 2020 North American Battery Electric Vehicle (BEV) Production Share (%) by Country – Canada, Mexico and United States

Chart 90: North American Hybrid Electric Vehicle (HEV) Production (2011-2020) by Country – Mexico and United States

Chart 91: Glance at 2011, 2015 and 2020 North American Hybrid Electric Vehicle (HEV) Production Share (%) by Country – Mexico and United States

Chart 92: North American Plug-in Hybrid Electric Vehicle (PHEV) Production (2011-2020) by Country – United States

Chart 93: North American Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) in Volume ('000 Units) and Value (USD Million)

Chart 94: North American Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in '000 Units

Chart 95: Glance at 2011, 2015 and 2020 North American Fans & Blowers in Hybrid and Electric Vehicles Volume Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 96: North American Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in USD Million

Chart 97: Glance at 2011, 2015 and 2020 North American Fans & Blowers in Hybrid and Electric Vehicles Value Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 98: North American Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Country – Canada, Mexico and United States in '000 Units

Chart 99: Glance at 2011, 2015 and 2020 North American Electric Fans in Hybrid and Electric Vehicle Engine Cooling Volume Market Share (%) Analysis by Country –

Canada, Mexico and United States

Chart 100: North American Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Country – Canada, Mexico and United States in USD Million

Chart 101: Glance at 2011, 2015 and 2020 North American Electric Fans in Hybrid and Electric Vehicle Engine Cooling Value Market Share (%) Analysis by Country – Canada, Mexico and United States

Chart 102: North American Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Country – Canada, Mexico and United States in '000 Units

Chart 103: Glance at 2011, 2015 and 2020 North American Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Volume Market Share (%) Analysis by Country – Canada, Mexico and United States

Chart 104: North American Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Country – Canada, Mexico and United States in USD Million

Chart 105: Glance at 2011, 2015 and 2020 North American Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Value Market Share (%) Analysis by Country – Canada, Mexico and United States

Chart 106: North American Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market Analysis (2011-2020) by Country – Mexico and United States in '000 Units

Chart 107: Glance at 2011, 2015 and 2020 North American Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Volume Market Share (%) Analysis by Country – Mexico and United States

Chart 108: North American Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market Analysis (2011-2020) by Country – Mexico and United States in USD Million

Chart 109: Glance at 2011, 2015 and 2020 North American Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Value Market Share (%) Analysis by Country – Mexico and United States

Chart 110: North American Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling by Country Market Analysis (2011-2020) – United States in Volume ('000 Units) and Value (USD Million)

Chart 111: North American Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Country – Canada, Mexico and United States in '000 Units

Chart 112: Glance at 2011, 2015 and 2020 North American Blowers in Hybrid and Electric Vehicle HVAC Volume Market Share (%) Analysis by Country – Canada, Mexico and United States

Chart 113: North American Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Country – Canada, Mexico and United States in USD Million

Chart 114: Glance at 2011, 2015 and 2020 North American Blowers in Hybrid and Electric Vehicle HVAC Value Market Share (%) Analysis by Country – Canada, Mexico and United States

Chart 115: North American Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Country – Canada, Mexico and United States in '000 Units

Chart 116: Glance at 2011, 2015 and 2020 North American Blowers in Battery Electric Vehicle (BEV) HVAC Volume Market Share (%) Analysis by Country – Canada, Mexico and United States

Chart 117: North American Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Country – Canada, Mexico and United States in USD Million

Chart 118: Glance at 2011, 2015 and 2020 North American Blowers in Battery Electric Vehicle (BEV) HVAC Value Market Share (%) Analysis by Country – Canada, Mexico and United States

Chart 119: North American Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Country – Mexico and United States in '000 Units

Chart 120: Glance at 2011, 2015 and 2020 North American Blowers in Hybrid Electric Vehicle (HEV) HVAC Volume Market Share (%) Analysis by Country – Mexico and United States

Chart 121: North American Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Country – Mexico and United States in USD Million

Chart 122: Glance at 2011, 2015 and 2020 North American Blowers in Hybrid Electric Vehicle (HEV) HVAC Value Market Share (%) Analysis by Country – Mexico and United States

Chart 123: North American Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Market Analysis (2011-2020) by Country – United States in Volume ('000 Units) and Value (USD Million)

Chart 124: North American Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Country – Mexico and United States in '000 Units

Chart 125: Glance at 2011, 2015 and 2020 North American Blowers in Hybrid and Electric Vehicle Battery Cooling Volume Market Share (%) Analysis by Country – Mexico and United States

Chart 126: North American Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Country – Mexico and United States in USD Million

Chart 127: Glance at 2011, 2015 and 2020 Value Market Share (%) Analysis for Blowers in Hybrid and Electric Vehicle Battery Cooling by Country – Mexico and United States

Chart 128: North American Blowers in Battery Electric Vehicle (BEV) Battery Cooling

Market Analysis (2011-2020) by Country – Mexico and United States in '000 Units

Chart 129: Glance at 2011, 2015 and 2020 North American Blowers in Battery Electric Vehicle (BEV) Battery Cooling Volume Market Share (%) Analysis by Country – Mexico and United States

Chart 130: North American Blowers in Battery Electric Vehicle (BEV) Battery Cooling Market Analysis (2011-2020) by Country – Mexico and United States in USD Million

Chart 131: Glance at 2011, 2015 and 2020 North American Blowers in Battery Electric Vehicle (BEV) Battery Cooling Value Market Share (%) Analysis by Country – Mexico and United States

Chart 132: North American Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Country – Mexico and United States in '000 Units

Chart 133: Glance at 2011, 2015 and 2020 North American Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Volume Market Share (%) Analysis by Country – Mexico and United States

Chart 134: North American Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Country – Mexico and United States in USD Million

Chart 135: Glance at 2011, 2015 and 2020 North American Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Value Market Share (%) Analysis by Country – Mexico and United States

Chart 136: North American Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Market Analysis (2011-2020) for by Country – United States in Volume ('000 Units) and Value (USD Million)

EUROPE

Chart 137: European Hybrid and Electric Vehicle Production (2011-2020) by Vehicle Type – BEV, HEV and PHEV in Units

Chart 138: Glance at 2011, 2015 and 2020 European Hybrid and Electric Vehicle Production Share (%) by Vehicle Type – BEV, HEV and PHEV

Chart 139: European Hybrid and Electric Vehicle Production (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in Units

Chart 140: Glance at 2011, 2015 and 2020 European Hybrid and Electric Vehicle Production Share (%) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 141: European Battery Electric Vehicle (BEV) Production (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in Units

Chart 142: Glance at 2011, 2015 and 2020 European Battery Electric Vehicle (BEV) Production Share (%) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 143: European Hybrid Electric Vehicle (HEV) Production (2011-2020) by Country – France, Germany, Italy and Spain in Units

Chart 144: Glance at 2011, 2015 and 2020 European Hybrid Electric Vehicle (HEV) Production Share (%) by Country – France, Germany, Italy and Spain

Chart 145: European Plug-in Hybrid Electric Vehicle (PHEV) Production (2011-2020) by Country – Germany, Sweden and United Kingdom in Units

Chart 146: Glance at 2011, 2015 and 2020 European Plug-in Hybrid Electric Vehicle (PHEV) Production Share (%) by Country – Germany, Sweden and United Kingdom

Chart 147: European Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) in Volume ('000 Units) and Value (USD Million)

Chart 148: European Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in '000 Units

Chart 149: Glance at 2011, 2015 and 2020 European Fans & Blowers in Hybrid and Electric Vehicles Volume Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 150: European Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in USD Million

Chart 151: Glance at 2011, 2015 and 2020 European Fans & Blowers in Hybrid and Electric Vehicles Value Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 152: European Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in '000 Units

Chart 153: Glance at 2011, 2015 and 2020 European Electric Fans in Hybrid and Electric Vehicle Engine Cooling Volume Market Share (%) Analysis by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 154: European Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in USD Million

Chart 155: Glance at 2011, 2015 and 2020 European Electric Fans in Hybrid and Electric Vehicle Engine Cooling Value Market Share (%) Analysis by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 156: European Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in '000 Units

Chart 157: Glance at 2011, 2015 and 2020 European Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Volume Market Share (%) Analysis by Country – Finland,

France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 158: European Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in USD Million

Chart 159: Glance at 2011, 2015 and 2020 European Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Value Market Share (%) Analysis by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 160: European Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market Analysis (2011-2020) by Country – France, Germany, Italy and Spain in '000 Units

Chart 161: Glance at 2011, 2015 and 2020 European Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Volume Market Share (%) Analysis by Country – France, Germany, Italy and Spain

Chart 162: European Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market Analysis (2011-2020) by Country – France, Germany, Italy and Spain in USD Million

Chart 163: Glance at 2011, 2015 and 2020 European Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Value Market Share (%) Analysis by Country – France, Germany, Italy and Spain

Chart 164: European Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Market Analysis (2011-2020) by Country – Germany, Sweden and United Kingdom in '000 Units

Chart 165: Glance at 2011, 2015 and 2020 European Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Volume Market Share (%) Analysis by Country – Germany, Sweden and United Kingdom

Chart 166: European Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Market Analysis (2011-2020) by Country – Germany, Sweden and United Kingdom in USD Million

Chart 167: Glance at 2011, 2015 and 2020 European Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Value Market Share (%) Analysis by Country – Germany, Sweden and United Kingdom

Chart 168: European Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in '000 Units

Chart 169: Glance at 2011, 2015 and 2020 European Blowers in Hybrid and Electric Vehicle HVAC Volume Market Share (%) Analysis by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 170: European Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and

United Kingdom in USD Million

Chart 171: Glance at 2011, 2015 and 2020 European Blowers in Hybrid and Electric Vehicle HVAC Value Market Share (%) Analysis by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 172: European Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in '000 Units

Chart 173: Glance at 2011, 2015 and 2020 European Blowers in Battery Electric Vehicle (BEV) HVAC Volume Market Share (%) Analysis by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 174: European Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom in USD Million

Chart 175: Glance at 2011, 2015 and 2020 European Blowers in Battery Electric Vehicle (BEV) HVAC Value Market Share (%) Analysis by Country – Finland, France, Germany, Italy, Spain, Sweden, Turkey and United Kingdom

Chart 176: European Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Country – France, Germany, Italy and Spain in '000 Units

Chart 177: Glance at 2011, 2015 and 2020 European Blowers in Hybrid Electric Vehicle (HEV) HVAC Volume Market Share (%) Analysis by Country – France, Germany, Italy and Spain

Chart 178: European Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Country – France, Germany, Italy and Spain in USD Million

Chart 179: Glance at 2011, 2015 and 2020 European Blowers in Hybrid Electric Vehicle (HEV) HVAC Value Market Share (%) Analysis by Country – France, Germany, Italy and Spain

Chart 180: European Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Market Analysis (2011-2020) by Country – Germany, Sweden and United Kingdom in '000 Units

Chart 181: Glance at 2011, 2015 and 2020 European Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Volume Market Share (%) Analysis by Country – Germany, Sweden and United Kingdom

Chart 182: European Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Market Analysis (2011-2020) by Country – Germany, Sweden and United Kingdom in USD Million

Chart 183: Glance at 2011, 2015 and 2020 European Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Value Market Share (%) Analysis by Country – Germany, Sweden and United Kingdom

Chart 184: European Blowers in Hybrid and Electric Vehicle Battery Cooling Market

Analysis (2011-2020) by Country – France, Germany, Spain, Turkey and United Kingdom in '000 Units

Chart 185: Glance at 2011, 2015 and 2020 European Blowers in Hybrid and Electric Vehicle Battery Cooling Volume Market Share (%) Analysis by Country – France, Germany, Spain, Turkey and United Kingdom

Chart 186: European Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Country – France, Germany, Spain, Turkey and United Kingdom in USD Million

Chart 187: Glance at 2011, 2015 and 2020 European Blowers in Hybrid and Electric Vehicle Battery Cooling Value Market Share (%) Analysis by Country – France, Germany, Spain, Turkey and United Kingdom

Chart 188: European Blowers in Battery Electric Vehicle (BEV) Battery Cooling Market Analysis (2011-2020) by Country – France, Germany, Spain, Turkey and United Kingdom in '000 Units

Chart 189: Glance at 2011, 2015 and 2020 European Blowers in Battery Electric Vehicle (BEV) Battery Cooling Volume Market Share (%) Analysis by Country – France, Germany, Spain, Turkey and United Kingdom

Chart 190: European Battery Electric Vehicle (BEV) Battery Cooling Market Analysis (2011-2020) Blowers in by Country – France, Germany, Spain, Turkey and United Kingdom in USD Million

Chart 191: Glance at 2011, 2015 and 2020 European Blowers in Battery Electric Vehicle (BEV) Battery Cooling Value Market Share (%) Analysis by Country – France, Germany, Spain, Turkey and United Kingdom

Chart 192: European Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Country – France, Germany and Spain in '000 Units

Chart 193: Glance at 2011, 2015 and 2020 European Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Volume Market Share (%) Analysis by Country – France, Germany and Spain

Chart 194: European Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Country – France, Germany and Spain in USD Million

Chart 195: Glance at 2011, 2015 and 2020 European Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Value Market Share (%) Analysis by Country – France, Germany and Spain

ASIA-PACIFIC

Chart 196: Asia-Pacific Hybrid and Electric Vehicle Production (2011-2020) by Vehicle Type – BEV, HEV and PHEV in Units

Chart 197: Glance at 2011, 2015 and 2020 Asia-Pacific Hybrid and Electric Vehicle

Production Share (%) by Vehicle Type – BEV, HEV and PHEV

Chart 198: Asia-Pacific Hybrid and Electric Vehicle Production (2011-2020) by Country – China, Japan, Malaysia and South Korea in Units

Chart 199: Glance at 2011, 2015 and 2020 Asia-Pacific Hybrid and Electric Vehicle Production Share (%) by Country – China, Japan, Malaysia and South Korea

Chart 200: Asia-Pacific Battery Electric Vehicle (BEV) Production (2011-2020) by Country – China, Japan and South Korea in Units

Chart 201: Glance at 2011, 2015 and 2020 Asia-Pacific Battery Electric Vehicle (BEV) Production Share (%) by Country – China, Japan and South Korea

Chart 202: Asia-Pacific Hybrid Electric Vehicle (HEV) Production (2011-2020) by Country – China, Japan, Malaysia and South Korea in Units

Chart 203: Glance at 2011, 2015 and 2020 Asia-Pacific Hybrid Electric Vehicle (HEV) Production Share (%) by Country – China, Japan, Malaysia and South Korea

Chart 204: Asia-Pacific Plug-in Hybrid Electric Vehicle (PHEV) Production (2011-2020) by Country – China, Japan and South Korea in Units

Chart 205: Glance at 2011, 2015 and 2020 Asia-Pacific Plug-in Hybrid Electric Vehicle (PHEV) Production Share (%) by Country – China, Japan and South Korea

Chart 206: Asia-Pacific Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) in Volume ('000 Units) and Value (USD Million)

Chart 207: Asia-Pacific Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in '000 Units

Chart 208: Glance at 2011, 2015 and 2020 Asia-Pacific Fans & Blowers in Hybrid and Electric Vehicles Volume Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 209: Asia-Pacific Fans & Blowers in Hybrid and Electric Vehicles Market Analysis (2011-2020) by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers in USD Million

Chart 210: Glance at 2011, 2015 and 2020 Asia-Pacific Fans & Blowers in Hybrid and Electric Vehicles Value Market Share (%) Analysis by Type – Engine Cooling Fans, HVAC Blowers and Battery Cooling Blowers

Chart 211: Asia-Pacific Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in '000 Units

Chart 212: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Hybrid and Electric Vehicle Engine Cooling Volume Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 213: Asia-Pacific Electric Fans in Hybrid and Electric Vehicle Engine Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in

USD Million

Chart 214: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Hybrid and Electric Vehicle Engine Cooling Value Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 215: Asia-Pacific Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Country – China, Japan and South Korea in '000 Units

Chart 216: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Volume Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 217: Asia-Pacific Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Market Analysis (2011-2020) by Country – China, Japan and South Korea in USD Million

Chart 218: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Battery Electric Vehicle (BEV) Engine Cooling Value Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 219: Asia-Pacific Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in '000 Units

Chart 220: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Volume Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 221: Asia-Pacific Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in USD Million

Chart 222: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Hybrid Electric Vehicle (HEV) Engine Cooling Value Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 223: Asia-Pacific Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Market Analysis (2011-2020) by Country – China, Japan and South Korea in '000 Units

Chart 224: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Volume Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 225: Asia-Pacific Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Market Analysis (2011-2020) by Country – China, Japan and South Korea in USD Million

Chart 226: Glance at 2011, 2015 and 2020 Asia-Pacific Electric Fans in Plug-in Hybrid Electric Vehicle (PHEV) Engine Cooling Value Market Share (%) Analysis for by Country – China, Japan and South Korea

Chart 227: Asia-Pacific Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in '000 Units

Chart 228: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid and Electric Vehicle HVAC Volume Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 229: Asia-Pacific Blowers in Hybrid and Electric Vehicle HVAC Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in USD Million

Chart 230: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid and Electric Vehicle HVAC Value Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 231: Asia-Pacific Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Country – China, Japan and South Korea in '000 Units

Chart 232: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Battery Electric Vehicle (BEV) HVAC Volume Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 233: Asia-Pacific Blowers in Battery Electric Vehicle (BEV) HVAC Market Analysis (2011-2020) by Country – China, Japan and South Korea in USD Million

Chart 234: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Battery Electric Vehicle (BEV) HVAC Value Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 235: Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in '000 Units

Chart 236: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) HVAC Volume Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 237: Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) HVAC Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in USD Million

Chart 238: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) HVAC Value Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 239: Asia-Pacific Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Market Analysis (2011-2020) by Country – China, Japan and South Korea in '000 Units

Chart 240: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Volume Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 241: Asia-Pacific Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Market Analysis (2011-2020) by Country – China, Japan and South Korea in USD Million

Chart 242: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Plug-in Hybrid Electric Vehicle (PHEV) HVAC Value Market Share (%) Analysis by Country – China,

Japan and South Korea

Chart 243: Asia-Pacific Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in '000 Units

Chart 244: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid and Electric Vehicle Battery Cooling Volume Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 245: Asia-Pacific Blowers in Hybrid and Electric Vehicle Battery Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in USD Million

Chart 246: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid and Electric Vehicle Battery Cooling Value Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 247: Asia-Pacific Blowers in Battery Electric Vehicle (BEV) Battery Cooling Market Analysis (2011-2020) by Country – China, Japan and South Korea in '000 Units

Chart 248: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Battery Electric Vehicle (BEV) Battery Cooling Volume Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 249: Asia-Pacific Blowers in Battery Electric Vehicle (BEV) Battery Cooling Market Analysis (2011-2020) by Country – China, Japan and South Korea in USD Million

Chart 250: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Battery Electric Vehicle (BEV) Battery Cooling Value Market Share (%) Analysis by Country – China, Japan and South Korea

Chart 251: Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in '000 Units

Chart 252: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Volume Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 253: Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Market Analysis (2011-2020) by Country – China, Japan, Malaysia and South Korea in USD Million

Chart 254: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Hybrid Electric Vehicle (HEV) Battery Cooling Value Market Share (%) Analysis by Country – China, Japan, Malaysia and South Korea

Chart 255: Asia-Pacific Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Market Analysis (2011-2020) by Country – China and Japan in '000 Units

Chart 256: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Plug-in Hybrid

Electric Vehicle (PHEV) Battery Cooling Volume Market Share (%) Analysis by Country – China and Japan

Chart 257: Asia-Pacific Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Market Analysis (2011-2020) by Country – China and Japan in USD Million

Chart 258: Glance at 2011, 2015 and 2020 Asia-Pacific Blowers in Plug-in Hybrid Electric Vehicle (PHEV) Battery Cooling Value Market Share (%) Analysis by Country – China and Japan

Tables

TABLES:

Table 1: Major Applications for Fans in Different Segments of Automotive/Transportation Vehicles

Table 2: Major Applications for Blowers in Different Segments of Automotive/Transportation Vehicles

Table 3: Battery Electric Vehicle Models and their Battery Cooling Technologies

Table 4: Hybrid Electric Vehicle Models and their Battery Cooling Technologies

Table 5: Plug-in Hybrid Electric Vehicle Models and their Battery Cooling Technologies

Table 6: Global Leading Battery Electric Vehicle (BEV) Manufacturers – 2014 Production

Table 7: Global Leading Hybrid Electric Vehicle (HEV) Manufacturers – 2014 Production

Table 8: Global Leading Plug-in Hybrid Electric Vehicle (PHEV) Manufacturers – 2014 Production

Table 9: 2014 Leading Manufacturers (OEMs) of Battery Electric Vehicles (BEVs) in North America

Table 10: 2014 Leading Manufacturers (OEMs) of Hybrid Electric Vehicles (HEVs) in North America

Table 11: 2014 Leading Manufacturers (OEMs) of Plug-in Hybrid Electric Vehicles (PHEVs) in United States

Table 12: 2014 Leading Manufacturers (OEMs) of Battery Electric Vehicles (BEVs) in Europe

Table 13: 2014 Leading Manufacturers (OEMs) of Hybrid Electric Vehicles (HEVs) in Europe

Table 14: 2014 Leading Manufacturers (OEMs) of Plug-in Hybrid Electric Vehicles (PHEVs) in Europe

Table 15: 2014 Leading Manufacturers (OEMs) of Battery Electric Vehicles (BEVs) in Asia-Pacific

Table 16: 2014 Leading Manufacturers (OEMs) of Hybrid Electric Vehicles (HEVs) in Asia-Pacific

Table 17: 2014 Leading Manufacturers (OEMs) of Plug-in Hybrid Electric Vehicles (PHEVs) in Asia-Pacific

Figures

FIGURES:

Figure 1: Basic Engine Cooling System

Figure 2: Electric Cooling Fan

Figure 3: Types of HVAC Blowers

Figure 4: Hybrid and Electric Vehicle Electric Cooling Fan Modules

Figure 5: Battery Cooling Blower

Figure 6: Passive Air Cooling – Battery

Figure 7: Active Air Cooling – Battery

Figure 8: Liquid Cooling – Battery

I would like to order

Product name: Global Hybrid and Electric Vehicle Fans & Blowers Market - BEV, HEV and PHEV

Product link: <https://marketpublishers.com/r/G8697E5A092EN.html>

Price: US\$ 3,960.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G8697E5A092EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970