

# **Global Aircraft Electrification Market Size study & Forecast, by Component (Batteries, Fuel Cells, Electric Actuators, Generators, Motors, Power Electronics, Distribution Devices, Others) by Application (Power Generation, Power Distribution, Power Conversion, Energy Storage), by Technology (More Electric, Hybrid Electric, Fully Electric) and Regional Analysis, 2023-2030**

<https://marketpublishers.com/r/G82C52AA9B96EN.html>

Date: May 2023

Pages: 200

Price: US\$ 4,950.00 (Single User License)

ID: G82C52AA9B96EN

## **Abstracts**

Global Aircraft Electrification Market is valued approximately USD XXX billion in 2022 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2023-2030. Aircraft electrification is the process of replacing traditional mechanical, hydraulic, and pneumatic systems in aircraft with electrical systems. This involves using electric motors, batteries, and other power electronics to control various aircraft functions, including propulsion, environmental control, and flight control. Aircraft electrification has gained traction in recent years as a way to reduce the environmental impact of air travel. Electric aircraft are much quieter and emit far fewer pollutants than traditional aircraft. In addition, they are more efficient, which means they use less fuel and can fly further on a single charge. The key factor driving the market growth is growing need for cleaner and quieter aircraft, advances in batteries, electric motors, and power electronics, increase in demand for unmanned aerial vehicles, and surging demand for electrical systems in aircraft that anticipated to create the lucrative demand for the market during forecast period.

Moreover, the rising demand for unmanned aerial vehicles (UAVs) is one of the factors driving the growth of the aircraft electrification market. UAVs require reliable and

efficient power systems to operate, and electrification technologies are becoming increasingly popular to achieve these requirements. Electric propulsion systems are being used in UAVs to provide a more efficient and cleaner alternative to traditional combustion engines. These systems offer benefits such as reduced fuel consumption, lower emissions, and quieter operation, making them ideal for applications such as surveillance, reconnaissance, and cargo transport. According to Statista, in 2018, the global unmanned aerial vehicles was valued USD 25.59 billion, and the number is anticipated to reach USD 70.28 billion by 2029. As a result, the rising UAVs market is anticipated to support the market growth during forecast period. Additionally, development of lithium-ion batteries, and emergence of advanced air mobility is anticipated to create the lucrative opportunity for the market during forecast period. However, the high limited range of electric aircraft stifles market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Aircraft Electrification Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to the presence of key market players including Boeing, Lockheed Corporation, and others, rising demand for electric and hybrid-electric aircraft, and growing investments by key market players in the field of aircraft electrification. Asia Pacific is expected to grow significantly during the forecast period, owing to factors such as rising adoption of electric propulsion, technologically advanced capabilities along with skilled human effort, improving domestic capabilities of aerospace industry, and penetration of advanced technologies in international as well as domestic air traffic.

Major market player included in this report are:

Ametek.Inc.

Astronics Corporation

BAE Systems

Collins Aerospace

Honeywell International Inc.

MagniX

Meggitt plc

Rolls-Royce plc

Safran S.A.

Thales Group

Recent Developments in the Market:

In February 2022, Boeing was selected by GE Aviation to assist with flying tests of its hybrid-electric propulsion system using a modified Saab 340B aircraft and CT7-9B

turboprop engines. Services for aircraft modification, system integration, and flight testing will be offered to GE Aviation by Boeing and its affiliate Aurora Flight Sciences.

Global Aircraft Electrification Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered - Component, Application, Technology, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and Component offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Component:

Batteries

Fuel Cells

Electric Actuators

Generators

Motors

Power Electronics

Distribution Devices

Others

By Application:

Power Generation

Power Distribution

Power Conversion

Energy Storage

By Technology:

More Electric

Hybrid Electric

Fully Electric

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

RoAPAC

Latin America

Brazil

Mexico

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

## Contents

### **CHAPTER 1. EXECUTIVE SUMMARY**

- 1.1. Market Snapshot
- 1.2. Global & Segmental Market Estimates & Forecasts, 2020-2030 (USD Billion)
  - 1.2.1. Aircraft Electrification Market, by Region, 2020-2030 (USD Billion)
  - 1.2.2. Aircraft Electrification Market, by Component, 2020-2030 (USD Billion)
  - 1.2.3. Aircraft Electrification Market, by Application, 2020-2030 (USD Billion)
  - 1.2.4. Aircraft Electrification Market, by Technology, 2020-2030 (USD Billion)
- 1.3. Key Trends
- 1.4. Estimation Methodology
- 1.5. Research Assumption

### **CHAPTER 2. GLOBAL AIRCRAFT ELECTRIFICATION MARKET DEFINITION AND SCOPE**

- 2.1. Objective of the Study
- 2.2. Market Definition & Scope
  - 2.2.1. Industry Evolution
  - 2.2.2. Scope of the Study
- 2.3. Years Considered for the Study
- 2.4. Currency Conversion Rates

### **CHAPTER 3. GLOBAL AIRCRAFT ELECTRIFICATION MARKET DYNAMICS**

- 3.1. Aircraft Electrification Market Impact Analysis (2020-2030)
  - 3.1.1. Market Drivers
    - 3.1.1.1. Growing need for cleaner and quieter aircraft
    - 3.1.1.2. Advances in batteries, electric motors, and power electronics
    - 3.1.1.3. Rise in demand for unmanned aerial vehicles
  - 3.1.2. Market Challenges
    - 3.1.2.1. Limited range of electric aircraft
  - 3.1.3. Market Opportunities
    - 3.1.3.1. Development of lithium-ion batteries
    - 3.1.3.2. Emergence of advanced air mobility

### **CHAPTER 4. GLOBAL AIRCRAFT ELECTRIFICATION MARKET INDUSTRY ANALYSIS**

- 4.1. Porter's 5 Force Model
  - 4.1.1. Bargaining Power of Suppliers
  - 4.1.2. Bargaining Power of Buyers
  - 4.1.3. Threat of New Entrants
  - 4.1.4. Threat of Substitutes
  - 4.1.5. Competitive Rivalry
- 4.2. Porter's 5 Force Impact Analysis
- 4.3. PEST Analysis
  - 4.3.1. Political
  - 4.3.2. Economical
  - 4.3.3. Social
  - 4.3.4. Technological
  - 4.3.5. Environmental
  - 4.3.6. Legal
- 4.4. Top investment opportunity
- 4.5. Top winning strategies
- 4.6. COVID-19 Impact Analysis
- 4.7. Disruptive Trends
- 4.8. Industry Expert Perspective
- 4.9. Analyst Recommendation & Conclusion

## **CHAPTER 5. GLOBAL AIRCRAFT ELECTRIFICATION MARKET, BY COMPONENT**

- 5.1. Market Snapshot
- 5.2. Global Aircraft Electrification Market by Component, Performance - Potential Analysis
- 5.3. Global Aircraft Electrification Market Estimates & Forecasts by Component 2020-2030 (USD Billion)
- 5.4. Aircraft Electrification Market, Sub Segment Analysis
  - 5.4.1. Batteries
  - 5.4.2. Fuel Cells
  - 5.4.3. Electric Actuators
  - 5.4.4. Generators
  - 5.4.5. Motors
  - 5.4.6. Power Electronics
  - 5.4.7. Distribution Devices
  - 5.4.8. Others

## **CHAPTER 6. GLOBAL AIRCRAFT ELECTRIFICATION MARKET, BY APPLICATION**

- 6.1. Market Snapshot
- 6.2. Global Aircraft Electrification Market by Application, Performance - Potential Analysis
- 6.3. Global Aircraft Electrification Market Estimates & Forecasts by Application 2020-2030 (USD Billion)
- 6.4. Aircraft Electrification Market, Sub Segment Analysis
  - 6.4.1. Power Generation
  - 6.4.2. Power Distribution
  - 6.4.3. Power Conversion
  - 6.4.4. Energy Storage

## **CHAPTER 7. GLOBAL AIRCRAFT ELECTRIFICATION MARKET, BY TECHNOLOGY**

- 7.1. Market Snapshot
- 7.2. Global Aircraft Electrification Market by Technology, Performance - Potential Analysis
- 7.3. Global Aircraft Electrification Market Estimates & Forecasts by Technology 2020-2030 (USD Billion)
- 7.4. Aircraft Electrification Market, Sub Segment Analysis
  - 7.4.1. More Electric
  - 7.4.2. Hybrid Electric
  - 7.4.3. Fully Electric

## **CHAPTER 8. GLOBAL AIRCRAFT ELECTRIFICATION MARKET, REGIONAL ANALYSIS**

- 8.1. Top Leading Countries
- 8.2. Top Emerging Countries
- 8.3. Aircraft Electrification Market, Regional Market Snapshot
- 8.4. North America Aircraft Electrification Market
  - 8.4.1. U.S. Aircraft Electrification Market
    - 8.4.1.1. Component breakdown estimates & forecasts, 2020-2030
    - 8.4.1.2. Application breakdown estimates & forecasts, 2020-2030
    - 8.4.1.3. Technology breakdown estimates & forecasts, 2020-2030
  - 8.4.2. Canada Aircraft Electrification Market
- 8.5. Europe Aircraft Electrification Market Snapshot
  - 8.5.1. U.K. Aircraft Electrification Market

- 8.5.2. Germany Aircraft Electrification Market
- 8.5.3. France Aircraft Electrification Market
- 8.5.4. Spain Aircraft Electrification Market
- 8.5.5. Italy Aircraft Electrification Market
- 8.5.6. Rest of Europe Aircraft Electrification Market
- 8.6. Asia-Pacific Aircraft Electrification Market Snapshot
  - 8.6.1. China Aircraft Electrification Market
  - 8.6.2. India Aircraft Electrification Market
  - 8.6.3. Japan Aircraft Electrification Market
  - 8.6.4. Australia Aircraft Electrification Market
  - 8.6.5. South Korea Aircraft Electrification Market
  - 8.6.6. Rest of Asia Pacific Aircraft Electrification Market
- 8.7. Latin America Aircraft Electrification Market Snapshot
  - 8.7.1. Brazil Aircraft Electrification Market
  - 8.7.2. Mexico Aircraft Electrification Market
- 8.8. Middle East & Africa Aircraft Electrification Market
  - 8.8.1. Saudi Arabia Aircraft Electrification Market
  - 8.8.2. South Africa Aircraft Electrification Market
  - 8.8.3. Rest of Middle East & Africa Aircraft Electrification Market

## **CHAPTER 9. COMPETITIVE INTELLIGENCE**

- 9.1. Key Company SWOT Analysis
  - 9.1.1. Company
  - 9.1.2. Company
  - 9.1.3. Company
- 9.2. Top Market Strategies
- 9.3. Company Profiles
  - 9.3.1. Ametek.Inc.
    - 9.3.1.1. Key Information
    - 9.3.1.2. Overview
    - 9.3.1.3. Financial (Subject to Data Availability)
    - 9.3.1.4. Product Summary
    - 9.3.1.5. Recent Developments
  - 9.3.2. Astronics Corporation
  - 9.3.3. BAE Systems
  - 9.3.4. Collins Aerospace
  - 9.3.5. Honeywell International Inc.
  - 9.3.6. MagniX



- 9.3.7. Meggitt plc
- 9.3.8. Rolls-Royce plc
- 9.3.9. Safran S.A.
- 9.3.10. Thales Group

## **CHAPTER 10. RESEARCH PROCESS**

- 10.1. Research Process
  - 10.1.1. Data Mining
  - 10.1.2. Analysis
  - 10.1.3. Market Estimation
  - 10.1.4. Validation
  - 10.1.5. Publishing
- 10.2. Research Attributes
- 10.3. Research Assumption

## List Of Tables

### LIST OF TABLES

TABLE 1. Global Aircraft Electrification Market, report scope

TABLE 2. Global Aircraft Electrification Market estimates & forecasts by Region  
2020-2030 (USD Billion)

TABLE 3. Global Aircraft Electrification Market estimates & forecasts by Component  
2020-2030 (USD Billion)

TABLE 4. Global Aircraft Electrification Market estimates & forecasts by Application  
2020-2030 (USD Billion)

TABLE 5. Global Aircraft Electrification Market estimates & forecasts by Technology  
2020-2030 (USD Billion)

TABLE 6. Global Aircraft Electrification Market by segment, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 7. Global Aircraft Electrification Market by region, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 8. Global Aircraft Electrification Market by segment, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 9. Global Aircraft Electrification Market by region, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 10. Global Aircraft Electrification Market by segment, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 11. Global Aircraft Electrification Market by region, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 12. Global Aircraft Electrification Market by segment, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 13. Global Aircraft Electrification Market by region, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 14. Global Aircraft Electrification Market by segment, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 15. Global Aircraft Electrification Market by region, estimates & forecasts,  
2020-2030 (USD Billion)

TABLE 16. U.S. Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD  
Billion)

TABLE 17. U.S. Aircraft Electrification Market estimates & forecasts by segment  
2020-2030 (USD Billion)

TABLE 18. U.S. Aircraft Electrification Market estimates & forecasts by segment  
2020-2030 (USD Billion)

TABLE 19. Canada Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 20. Canada Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 21. Canada Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 22. UK Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 23. UK Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 24. UK Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 25. Germany Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 26. Germany Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 27. Germany Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 28. France Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 29. France Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 30. France Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 31. Italy Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 32. Italy Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 33. Italy Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 34. Spain Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 35. Spain Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 36. Spain Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 37. RoE Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 38. RoE Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 39. RoE Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 40. China Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 41. China Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 42. China Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 43. India Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 44. India Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 45. India Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 46. Japan Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 47. Japan Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 48. Japan Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 49. South Korea Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 50. South Korea Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 51. South Korea Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 52. Australia Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 53. Australia Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 54. Australia Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 55. RoAPAC Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 56. RoAPAC Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 57. RoAPAC Aircraft Electrification Market estimates & forecasts by segment

2020-2030 (USD Billion)

TABLE 58. Brazil Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 59. Brazil Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 60. Brazil Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 61. Mexico Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 62. Mexico Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 63. Mexico Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 64. RoLA Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 65. RoLA Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 66. RoLA Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 67. Saudi Arabia Aircraft Electrification Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 68. South Africa Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 69. RoMEA Aircraft Electrification Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 70. List of secondary sources, used in the study of global Aircraft Electrification Market

TABLE 71. List of primary sources, used in the study of global Aircraft Electrification Market

TABLE 72. Years considered for the study

TABLE 73. Exchange rates considered

List of tables and figures and dummy in nature, final lists may vary in the final deliverable

## List Of Figures

### LIST OF FIGURES

- FIG 1. Global Aircraft Electrification Market, research methodology
  - FIG 2. Global Aircraft Electrification Market, Market estimation techniques
  - FIG 3. Global Market size estimates & forecast methods
  - FIG 4. Global Aircraft Electrification Market, key trends 2022
  - FIG 5. Global Aircraft Electrification Market, growth prospects 2023-2030
  - FIG 6. Global Aircraft Electrification Market, porters 5 force model
  - FIG 7. Global Aircraft Electrification Market, pest analysis
  - FIG 8. Global Aircraft Electrification Market, value chain analysis
  - FIG 9. Global Aircraft Electrification Market by segment, 2020 & 2030 (USD Billion)
  - FIG 10. Global Aircraft Electrification Market by segment, 2020 & 2030 (USD Billion)
  - FIG 11. Global Aircraft Electrification Market by segment, 2020 & 2030 (USD Billion)
  - FIG 12. Global Aircraft Electrification Market by segment, 2020 & 2030 (USD Billion)
  - FIG 13. Global Aircraft Electrification Market by segment, 2020 & 2030 (USD Billion)
  - FIG 14. Global Aircraft Electrification Market, regional snapshot 2020 & 2030
  - FIG 15. North America Aircraft Electrification Market 2020 & 2030 (USD Billion)
  - FIG 16. Europe Aircraft Electrification Market 2020 & 2030 (USD Billion)
  - FIG 17. Asia pacific Aircraft Electrification Market 2020 & 2030 (USD Billion)
  - FIG 18. Latin America Aircraft Electrification Market 2020 & 2030 (USD Billion)
  - FIG 19. Middle East & Africa Aircraft Electrification Market 2020 & 2030 (USD Billion)
- List of tables and figures and dummy in nature, final lists may vary in the final deliverable

## I would like to order

Product name: Global Aircraft Electrification Market Size study & Forecast, by Component (Batteries, Fuel Cells, Electric Actuators, Generators, Motors, Power Electronics, Distribution Devices, Others) by Application (Power Generation, Power Distribution, Power Conversion, Energy Storage), by Technology (More Electric, Hybrid Electric, Fully Electric) and Regional Analysis, 2023-2030

Product link: <https://marketpublishers.com/r/G82C52AA9B96EN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G82C52AA9B96EN.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