

ANMD-MRS32-312 · Sustainable Aviation & Maritime

Electric Aircraft Components

A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US\$

WHY THIS REPORT

Electric aircraft components electrify flight to eliminate combustion emissions on short routes. Electric motors, aviation batteries and power electronics form the powertrain that lets aircraft OEMs, eVTOL developers and tier-1 suppliers build zero-emission and hybrid-electric aircraft. This decision-grade study sizes the global market three ways — value, units shipped and installed powertrains — across component type, sub-type, application and end user, across seven regions and four scenarios to 2032, with outlooks to 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report's backbone, not an afterthought. Beyond powertrain performance, electric aircraft components deliver measurable in-flight emissions elimination, noise reduction and electrified short-haul flight, while battery circularity strengthens the resource-security story.

Mapped Sustainable Development Goals:

SDG 7 Affordable Clean Energy	SDG 9 Industry & Infrastructure	SDG 11 Sustainable Cities	SDG 12 Responsible Consumption	SDG 13 Climate Action
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Measurable sustainability outcomes assessed:

- In-flight emissions eliminated on electrified segments
- Noise reduction and electrified short-haul mobility
- Embodied carbon, critical-mineral sourcing and battery end-of-life as material risks
- Battery circularity and component recyclability

Framework alignment: Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

WHAT'S INSIDE AT A GLANCE

53 Chapters	9 Report Parts	7 Regions Covered	40+ Country Markets
2025–32 Forecast Horizon	4 Forward Scenarios	25+ Companies Profiled	5 SDGs Mapped

REPORT COVERAGE

Geographic scope: North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. North America leads eVTOL-driven demand; Europe scales on aerospace primes; Asia Pacific is the growth engine in electric-propulsion and battery capacity.

MARKET OVERVIEW

From prototype to certified powertrain — where aviation-grade reliability defines value.

The electric aircraft components market is moving from prototype to certified, series-production powertrains. Demand is driven by aviation-decarbonisation targets, eVTOL and advanced-air-mobility emergence and regional-electric programmes, supported by motor, battery and power-electronics advances. The market is read three ways — value, units shipped and installed powertrains — and forecast under four scenarios, each region reported separately.

- North America leads eVTOL-driven demand, anchored by the United States, where eVTOL and regional-electric programmes drive component orders
- Europe scales on aerospace primes, with the UK, France and Germany combining electrical-aerospace expertise with decarbonisation policy
- Asia Pacific is the growth engine, as China and Japan build electric-propulsion and battery capacity
- Component type and sub-type segment the value — across electric motors, aviation batteries and power electronics

REGIONAL OUTLOOK

Across seven reporting regions, the report separates early commercialisation leaders from high-growth and emerging markets — each profiled in full rather than aggregated into Rest of World.

Region	Stage	Lead Markets & Drivers
North America	Innovation leader	United States, Canada — eVTOL, regional-electric, hybrid programmes
Europe	Aerospace anchor	UK, France, Germany, Netherlands — primes, decarbonisation policy, tier-1 base
Asia Pacific	Growth engine	China, Japan, South Korea, Singapore — propulsion, battery capacity, manufacturing
Middle East	High-growth	UAE, Saudi Arabia — AAM investment, sovereign capital, diversification
Latin America	Emerging	Brazil, Mexico — regional aviation, OEM partnerships
Africa	Frontier	South Africa, Egypt, Morocco — regional aviation, electrification pilots

KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
<ul style="list-style-type: none"> • Aviation-decarbonisation & emissions targets • eVTOL & advanced-air-mobility emergence • Regional-electric & hybrid programmes • Noise-reduction & operating-cost demand • Motor, battery & power-electronics technology gains 	<ul style="list-style-type: none"> • Battery energy-density & weight limits • Certification & airworthiness complexity • Critical-mineral & supply-chain exposure • Thermal-management & safety challenges • Charging & infrastructure readiness

SEGMENTATION SNAPSHOT

By Component Type	Electric motors · aviation batteries · power electronics
By Sub-Type	High-power-density motors · solid-state / Li-ion · SiC inverters
By Application	eVTOL · regional electric · hybrid-electric
By End User	Aircraft OEMs · eVTOL developers · tier-1 suppliers · research
By Component	Motors · batteries · inverters · fuel cells · thermal systems · wiring
By Business Model	Component sale · subsystem · build-to-print

TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

Part I — Report Foundation, Discovery and Strategic Intelligence

- › Chapter 1. Scope, Methodology and Report Architecture
- › Chapter 2. Industry Discovery Summary — Electric Aircraft Components
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

Part II — Market Intelligence, Sizing, Forecasting and Segmentation

- › Chapter 5. Industry Overview and Market Evolution
- › Chapter 6. Market Dynamics
- › Chapter 7. Global Market Size and Forecast, 2020–2032
- › Chapter 8. Market Segmentation Analysis
- › Chapter 9. End-User and Demand-Side Intelligence
- › Chapter 10. Pricing, Cost and Commercial Model Intelligence

Part III — Regional and Country Intelligence

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- › Chapter 12. North America Market Intelligence
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- › Chapter 20. Emerging and Next-Generation Technology Intelligence
- › Chapter 21. Category-Specific Intelligence Module
- › Chapter 22. Research, Innovation and Funding Landscape

Part V — Company, Competition, Patent and Project Intelligence

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- › Chapter 25. Mergers, Acquisitions, Partnerships and Ecosystem Intelligence
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- › Chapter 41. Investment, Sustainable Finance and Bankability Intelligence

Part VIII — Scenario, Future Intelligence and Final Due Diligence Verdict

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- › Chapter 43. Sustainability Due Diligence Framework and Data-Room Index
- › Chapter 44. Risk Register, RAG Rating and Anti-Greenwashing Screen
- › Chapter 45. Bottom-Line Verdict and Strategic Recommendations
- › Chapter 46. Implementation Roadmap and Stakeholder Playbooks

Part IX — Annexes, Directories and Reference Material

- › Chapter 47. Methodology Annex
- › Chapter 48. Corporate Directory and Company Intelligence Annex
- › Chapter 49. Patent Directory and Patent Intelligence Annex
- › Chapter 50. Project Intelligence Annex
- › Chapter 51. Forecast Annex
- › Chapter 52. Sustainability KPI Annex
- › Chapter 53. Reference Annexes

COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans established aerospace and engine majors, specialist clean-tech providers and systems integrators. Deal activity — powertrain partnerships, eVTOL supply agreements and battery-development programmes — signals a market consolidating around certified, bankable components.

Representative players profiled in the full report:

Rolls-Royce plc · Safran SA · Honeywell International Inc. · GE Aerospace · RTX Corporation · and 20+ further profiled players across motors, batteries and power electronics.

Investment intelligence: venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a clear, evidence-based investment recommendation.

KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global electric aircraft components market, and how fast will it grow to 2032?
- ? Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- ? How does aviation-grade power density change returns versus automotive components?
- ? Who leads, and where is the competitive and patent white space?
- ? Is the investment case bankable — and under what conditions?
- ? How does the technology align with the SDGs and emerging disclosure regulation?

WHY ANMD — THE DIFFERENCE

Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, water and natural-capital intelligence and a decision-ready bankability verdict in a single architecture.

- › Triangulated sizing — every market read three ways so value, volume and adoption views reconcile rather than conflict.
- › Region-honest forecasting — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- › Integrated evidence base — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- › No-fabrication discipline — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- › Anti-greenwashing rigour — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- › Decision-first structure — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear, evidence-based investment recommendation.

WHO SHOULD BUY THIS REPORT

Investors and infrastructure / PE funds, aircraft OEMs, eVTOL developers, tier-1 suppliers, research institutions, regulators and lenders, and corporate strategy and ESG teams, alongside strategic corporate planners and decision-makers.

Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at www.anewmarketdynamics.com · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at www.anewmarketdynamics.com. The full detailed table of contents will be sent directly to your registered company email address.