

Aircraft Electrification Market is expected to reach \$21.8 billion by the year 2032, as projected by AMR

By technology, the Fully Electric segment is anticipated to exhibit significant growth in the near future.



Conversion, and Energy Storage), by Technology (More Electric, Hybrid Electric, and Fully Electric): Global Opportunity Analysis and Industry Forecast, 2023-2032". According to the report, the global aircraft electrification industry generated \$6.2 billion in 2022, and is anticipated to generate \$21.8 billion by 2032, witnessing a CAGR of 13.5% from 2023 to 2032.

000000 00000 0000 000: <u>https://www.alliedmarketresearch.com/request-sample/A07105</u>

Aircraft electrification refers to the use of electric power in various systems and components of an aircraft, as opposed to traditional fossil fuel-based technologies. This covers electrically powered systems including air conditioning, hydraulic systems, and other auxiliary systems, as well as electric motors, batteries, power electronics, and distribution systems.

Prime determinants of growth

The global aircraft electrification market is driven by factors such as increasing need for cleaner and quieter aircraft, rise in demand for electrical components in aircraft, and advancement in electric aircraft propulsion systems. However, high voltage and thermal issues of aircraft electrical systems and high capital requirements are hampering the aircraft electrification market growth. On the contrary, expansion of alternative power sources, and development of lithiumion batteries are expected to offer remunerative opportunities for the expansion of the aircraft electrification market during the forecast period.

Key players operating in the global aircraft electrification market are Ametek, Astronics Corporation, BAE Systems plc., Honeywell International Inc., Magnix, Meggitt PLC, Collins Aerospace, Rolls Royce Plc, Safran, and Thales Group.

On the basis of technology, the global aircraft electrification market has been segmented into more electric, hybrid electric, and fully electric. Hybrid electric is a combination of electric and traditional combustion engines to power aircraft. In a hybrid electric aircraft, an electric motor is used to supplement the traditional gas turbine engine. Hybrid electric technology can help to achieve this goal by reducing fuel consumption and emissions. Airbus is in the development of hybrid electric aircraft technology. The company has developed a prototype hybrid electric aircraft called the E-Fan X, which is designed to be used for regional flights.

Furthermore, hybrid electric <u>technology in aircraft electrification</u> is the development of electric powertrains with greater power and efficiency. Companies such as MagniX and Ampaire are developing electric motors that can produce enough power to propel commercial aircraft. For instance, in 2020, the program tested a more electric flight control system on a Boeing 737, replacing traditional hydraulic systems with electric motors and actuators. In addition, Companies such as Bell and Joby Aviation are developing VTOL aircraft with hybrid-electric propulsion systems that could be used for urban air mobility and other applications.

Based on application, the power generation segment held the highest market share in 2022, accounting for nearly two-fifths of the global <u>aircraft electrification market revenue</u> and is estimated to maintain its leadership status throughout the forecast period, owing to the rise in global air traffic and the need for optimized performance delivery encourages the shift of the aviation industry toward electric power generation systems. However, the energy storage segment is projected to manifest the highest CAGR of 15.8% from 2023 to 2032, owing to the private organizations and government agencies have been developing advanced energy storage systems for keeping up with the aviation market trends.

0000000 00000000:

Based on region, Europe held the highest market share in terms of revenue in 2021, accounting for more than two-fifths of the global aircraft electrification market revenue and is estimated to maintain its leadership status throughout the forecast period, owing to rise in investment, and R&D activities among the civil, defense, and commercial aviation industries for developing power electronics, high-density electric motors and other technological advancements in the aviation

industry. However, the Asia-Pacific region is expected to witness the fastest CAGR of 15.6% from 2023 to 2032, owing to growing economies such as China, India, Japan, and others in the Asia-Pacific region require versatile air transportation solutions across the region.

Furthermore, several aircraft manufacturing companies are actively pursuing the development and adoption of electrification in aircraft. For instance, Airbus has been exploring various electric and hybrid-electric aircraft concepts, including the E-Fan X program, which aims to develop a hybrid-electric propulsion system for regional aircraft. The company has also unveiled three hydrogen-powered aircraft concepts that could enter service by 2035.

By component, the Fuel Cells segment is anticipated to exhibit significant growth in the near future.

By application, the Energy Storage segment is anticipated to exhibit significant growth in the near future.

By technology, the Fully Electric segment is anticipated to exhibit significant growth in the near future.

By region, Asia-Pacific is anticipated to register the highest CAGR during the forecast period.

Aircraft Fuel Systems Market - <u>https://www.prnewswire.com/news-releases/aircraft-fuel-systems-</u> market-to-reach-15-7-billion-globally-by-2031-at-6-5-cagr-allied-market-research-<u>301867967.html</u>

Aircraft Health Monitoring System Market - <u>https://www.globenewswire.com/en/news-</u> release/2022/06/22/2466995/0/en/Aircraft-Health-Monitoring-System-Market-to-Garner-7-27-<u>Billion-by-2030-Allied-Market-Research.html</u>

Electric Aircraft Market - <u>https://www.prnewswire.com/news-releases/electric-aircraft-market-</u> <u>size-to-reach-23-5-billion-globally-by-2031-at-10-9-cagr-allied-market-research-301794157.html</u>

Aircraft Engines Market - <u>https://www.globenewswire.com/en/news-</u> release/2022/08/18/2501020/0/en/Aircraft-Engines-Market-to-Generate-158-46-Billion-by-2031-<u>Allied-Market-</u>

<u>Research.html#:~:text=Portland%2C%20OR%2C%20Aug.,7.4%25%20from%202022%20to%20203</u>

<u>1</u>.

David Correa Allied Market Research +1 5038946022 email us here Visit us on social media: Facebook Twitter LinkedIn

This press release can be viewed online at: https://www.einpresswire.com/article/699687441

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.