

# Investor Alert: The Electric Vertical Take-Off and Landing Vehicle (eVTOL) Race is officially on.

The electric Vertical Take-Off and Landing vehicle ("eVTOL") sector looks set to be a new emerging trend over the next 5-10 years. The Global eVTOL market is forecast to grow from US\$162 million to US\$411 million from 2025 to 2030, at a CAGR of 20.42%. Morgan Stanley forecasts the Urban Air Mobility sector to be a \$1 trillion market by 2030.

<https://investorintel.com/wp-content/uploads/2021/09/iStock-1183925227.mp4>

eVTOLs can replace helicopters as they have much lower running costs and are up to 100x quieter than a helicopter. Another advantage is that they are emissions free. The only disadvantages for now relate to their limited range of around 150 miles.

Investors have several options of how to invest in the eVTOL market, with around 200 eVTOL companies existing today, albeit many are private companies.

The first is via existing aircraft manufacturers with eVTOL programs such as Airbus (FR: AIR | OTCPK: EADSY), Boeing Airways (NYSE: BA), or the Embraer (NYSE: ERJ | BR: EMBR3) backed spin-off Eve Urban Air Mobility (private). Eve Urban Air Mobility is said to be in discussions to go public via the SPAC Zanite Acquisition (NASDAQ: ZNTE).

A second way is via the listed pure play eVTOL companies of which there are four standouts.

Joby Aviation (NYSE: JOBY) is a California based advanced

stage eVTOL company developing eVTOLs and an eVTOL transport service. In early 2021 Joby raised \$1.6 billion via a SPAC merger which completed in August 11. Joby's S-4 eVTOL vehicle is being developed to operate as a commercial four passenger aircraft beginning in 2024 with a 150+ mile range and on a single charge. Joby is thought to be the closest company to eVTOL certification after agreeing to G1 certification conditions with the Federal Aviation Administration (FAA) in March 2021. Joby Aviation is not cheap on a market cap of US\$5.78 billion.

Lilium GmbH plan to list via the SPAC Qell Acquisition Corp. (NASDAQ: QELL). Lilium is a German eVTOL company that has developed a 6 passenger eVTOL with about 155 miles of range, and plans an air taxi service by 2025. Lilium will receive \$830m of proceeds from the SPAC merger. The funds received will be used to open a factory in Germany, finalize the design and assembly of their eVTOLs, complete the certification process, and launch global deployment. Lilium GmbH has signed a \$1 billion commercial deal and strategic alliance with leading Brazilian airline Azul S.A (NYSE: AZUL). As part of the deal, Lilium intend to sell 220 aircraft to Azul to operate across the network expected to start in 2025. Lilium trades on a pro-forma market cap of US\$3.32 billion, based on QELL at US\$10.00.

Vertical Aerospace Group Ltd. plan to list via SPAC Broadstone Acquisition Corp. (NYSE: BSN). Vertical Aerospace was founded in 2016 and is an English company. The Company has successfully produced several eVTOLs and is currently manufacturing their latest version "VA-X4" with a first flight planned for later in 2021. It will seat 4 passengers and have a range of 100+ miles. Vertical Aerospace says it has pre-orders for up to 1,000 eVTOLs with customers Avolon and American Airlines, along with a pre-order option from Virgin Atlantic, all valued at up to US\$4 billion. The company hopes to achieve certification by 2024 and then begin mass

production in 2024 of the VA-X4. Vertical Aerospace will receive cash proceeds of US\$394 million assuming the SPAC merger completes and will trade on a pro-forma market cap of US\$2.2 billion based on BSN at US\$10.00.

Archer Aviation plans to list via SPAC Atlas Crest Investment Corp. (NYSE: ACIC). Archer is based in California and plan to build and operate an eVTOL ecosystem. Archer recently demonstrated their first eVTOL named "Maker" in Los Angeles. It can carry 2 passengers for a 60 mile range. Future versions will have 4 seats and one assumes a longer range. Archer target to be producing and selling eVTOLs starting in 2024, subject to FAA certification. Archer has a definitive agreement with United Airlines for \$1 billion of Archer's eVTOLs with an option for an additional \$500 million.

Investing into the eVTOL sector does carry high risk due to the early stage of a new and emerging sector. Regulation and certification risk are significant. Another key risk is the large amounts of capital and time required to develop and produce a cost effective eVTOL. Finally SPACs carry other risks such as they may not complete the merger or early stage PIPE investors can be large sellers after the lockup period ends.

### **Closing remarks**

eVTOLs look to be significant new emerging trend with around 200 companies in a race to be first to market. The leading companies are discussed above and have a chance to produce certified eVTOLs as soon as 2024/25. Some eVTOL companies are focusing on design, certification, production and eVTOL sales; while others are planning to create an eVTOL transport service.

Only time will tell who will become the Tesla of eVTOLs. The rewards are high but so are the risks, so invest cautiously.