LILYPAD ELEVATE

Charge node outline

23-2055



FLYDNE



Proof of concept

Fly On E is laying the foundations of electric aviation in Australia. Electric aircraft currently available in Australia are now in operation in WA on our early network of charge nodes, proving the viability and capability of electric aviation in its current capacity (as the perfect trainer and recreational sports aircraft solution). There are electric aircraft currently operating in 3 Australian states with a strong growth forecast of LSA and 3-9 seat GA VFR aircraft.



Ist Generation

NOW

Training ops Recreation 2 seats **200** Ceneration

Recreation Short range commercial 2-4 seats



Ceneration

Commercial ops Corporate transport 5 - 19 seats .5 - 2 tonne Cargo

ES-191

SMART HANGAR SOLUTIONS AND CHARGE NODES

Airports of the future will look and operate very differently to airports of today. A higher volume of smaller Zero Emissions aircraft will operate within a faster turnaround time and in many cases, may be self-piloted. Airports will change shape, be much smaller and aesthetically pleasing, as the aircraft using them will be either capable of vertical take-off and landing similar to a present-day helicopter (EVTOL) or use a very very short take-off and landing space (STOL). Zero Emissions aircraft are quieter, allowing more aircraft to fly closer to metro and residential areas without noise disturbance. FlyOnE is already working with existing airports in the proposed Lilypad Elevate network to upgrade their infrastructure to include charge nodes for current and future electric aircraft.

FlyOnE seeks to become a primary infrastructure supplier for the electric aviation future by installing renewable energy collection, storage and delivery systems at the highest demand airports as more and more electric aircraft enter service in Australia





AIR TAXI NETWORK

Emerging electric aircraft present a new operational pattern option. A 50% reduction in operational costs means air transport operators can afford to operate up to 3 x the volume of service routes and still maintain a profitable business. These lower costs will also make personal, on-demand air taxi operations more accessible to general use travelers. More frequent departures and on-demand will offer a more customer centric experience as well as decongesting passenger movements inside airports.

In addition to assembly and distribution of viable, affordable electric aircraft, FlyOnE will operate an On-demand air taxi service under the Lilypad Elevate brand with 4 and 5 seat short to medium range electric aircraft.

FLYONE SMART HANGAR

In partnership with world-leading electric aircraft charge and design developers, FlyOnE is developing a complete renewable collection, storage and delivery system capable of grid tied OR completely OFF-GRID charge solutions for electric aircraft plus further charge capability of other ground vehicles such as cars, farm equipment and even backup power for business and hangar operations. Larger scale commercial aircraft entering service in the late 2020's will require 400-800kW charge capacity per aircraft. This will also require extensive grid engineering and a up to 1000kW battery buffer per aircraft. Costs can only be established with a site specific viability study.



A 250kW battery buffer is recommended for a single 200kW charger or dual 80kW charge node. Approx. Cost. \$330k

200kW

5 seat eCTOL and eVTOL will enter service in 2026 and require 200kW of charge capacity. No grid will support this charge node without buffer support. Estimated cost for a 200kW Charger is \$190k

100kW 🔊

A 100kW battery buffer is recommended for a single 80kW charger or dual 40kW charge node. Approx. Cost. \$130k

BOkW

Charge node cost

estimates

4 seat GA electric aircraft will enter operation in 2023 and will require an 80kW charge node (per aircraft) for fast charge. Some metro grids will support this current draw directly.Estimated cost is \$79k



40kW

A 50kW battery buffer is recommended for a 40kW charger. Approx. Cost. \$79k

Current electric aircraft in operation now require 20-40kW charger capability, many metro grids will support this current draw directly. Estimated charger cost is \$39K for 20kW, \$79K for 40kW

Jandakot Airport ypjt

Jandakot Airport is Ground Zero for electric aviation in Australia.

Since 2018, there have been electric aircraft operations based from private hangars on the Northern Apron. For a time, these operations were in Beta test mode, but no longer.

FlyOnE is now importing and distributing 2 seat Pipistrel trainer aircraft (LSA and GA) assembling/distributing longer range GA 3-4 seat aircraft and importing long range 5 seat twin prop electric aircraft through partnership agreements with multiple manufacturers.

There are two flight schools in Jandakot and in Murray Field now using electric aircraft with more to follow soon. As Jandakot is our current base of operations, there will be consistent use and growth of electric aircraft operations at that site, which is also Australia's busiest airport for flight training operations, in part, due to the stable weather.

Other sites indicated on our map will have different and unique requirements based on the operations of Lilypad Elevate and our partner operators in those areas.

PROPOSAL

We propose to work with you to develop Australian airport energy management and growth requirements to support the adoption of electric aviation by more aircraft operators and flight schools.

In addition to future proofing regional airport energy requirements for electric aviation, we can assist with complete off grid power solutions to run whole regional airport facilities and additional services such as electric ground support equipment and electric car chargers on the non-air side of the proposed sites.

As FlyOnE continues to grow the adoption of electric aviation in Australia there will be a growing demand for energy solutions and upgrades providing a whole new business opportunity for energy capture, collection, storage and supply at central and regional airports as well as unique eVTOL and Sea-plane sites.

For a visualisation of how we see airport operations looking in the future, please watch $\underline{\sf THIS \ VIDEO}$

I hope we can work together to build a better brighter future of decentralised renewable energy consumption for a cleaner and greener future of aviation and surrounding services.

Korum E CEO and Founder of FlyOnE Sustainable Aviation.

